GEF-6 REQUEST FOR ONE-STEP MEDIUM-SIZED PROJECT APPROVAL

TYPE OF TRUST FUND: GEF TRUST FUND

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PART I: PROJECT INFORMATION

Project Title:	Promoting Protected Areas Management through Integrated Marine and Coastal Ecosystems Protection in Coastal Area of Montenegro		
Country(ies):	Montenegro	GEF Project ID:[1]	9762
GEF Agency(ies):	UNEP	GEF Agency Project ID:	01550
Other Executing Partner(s):	UN Environment Europe Office	Resubmission Date:	August 14, 2017
GEF Focal Area (s):	Biodiversity	Project Duration (Months)	36
Integrated Approach Pilot	IAP-Cities ☐ IAP-Commodities ☐ IAP-Food Security ☐	Corporate Program: SGP ☐	
Name of Parent Program	[if applicable]	Agency Fee ($)	152,279

A. FOCAL AREA STRATEGY FRAMEWORK AND PROGRAM [2]

Focal Area Objectives/Programs	Focal Area Outcomes	Trust Fund	(in $)	
			GEF Project Financing	Co-financing
BD-1 Program 1 (select) (select)	Improving Financial Sustainability and Effective Management of the National Ecological Infrastructure	GEFTF	700,940	5,003,675
BD-1 Program 2 (select) (select)	Nature's Last Stand: Expanding the Reach of the Global Protected Area Estate	GEFTF	902,000	7,450,000
	Total project costs		1,602,940	12,453,675

B. PROJECT FRAMEWORK

Project Objective: To improve the conservation and sustainable use of coastal and marine biodiversity through effective management of the coastal and marine protected areas (C / MPAs) subsystem by addressing institutional and financial sustainability.

Project Components/ Programs	Financing Type [3]	Project Outcomes	Project Outputs	Trust Fund	(in $)	
					GEF Project Financing	Confirmed Co-financing
1. Protection of valuable coastal and marine biodiversity assets and establishment of the integrated subsystem[4] of C / MPAs	TA	1.1 Representative C / MPAs identified to protect key coastal and marine ecosystems and biodiversity of global importance *At least one data set on biodiversity assets for the all coastal and marine ecosystems*	1.1.1 The biodiversity and ecosystem services of coastal and marine ecosystems are assessed and nationally and globally significant sites for biodiversity conservation are identified as per national and international standards and requirements (UN	GEFTF	800,000	7,400,000

[1] Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions..

[2] When completing Table A, refer to the excerpts on GEF 6 Results Frameworks for GETF, LDCF and SCCF and CBIT programming directions.

[3] Financing type can be either investment or technical assistance.

[4] Subsystem of PAs is considered as an internal component (IUCN PA Guide no. 10 and 21) of the National System of PAs that is designed to: (i) define better processes of decentralization and regionalization of PA activities (IUCN PA Guide no. 10, pg. 11) (ii) provide better links to other national system plans, other planning and legislature (IUCN PA guide no. 10, pg. 19) particularly for Coastal Area.

		covering 93,243.48 hectares of coastal area of Montenegro[5]	CBD[6]/Aichi targets and other, including EcAp[7], GES[8], Natura and Emerald network, etc.) 1.1.2 Comprehensive database on the status of coastal and marine ecosystems is established as to support science policy interface for protection of biodiversity assets and harmonization of development plans with the value of biodiversity assets and aligned with work towards creating an updated sub-regional data base on important marine areas			
		1.2 Management framework in place involving all relevant stakeholders for (i) network of C / MPAs in Montenegro; (ii) expansion of C / MPAs; (iii) compatibility of land/sea/natural resources usage with overall biodiversity management goal *7 points increase in the Capacity Development Scorecard the Ministry of Sustainable Development and Tourism (Baseline:16; Target: 23)*	1.2.1 Capacity and governance needs, including technical needs, human resources (including gender consideration) and legislation needs for successful management of C / MPAs identified 1.2.2 Joint multi-stakeholder C / MPAs working group established to form a coordination mechanism for project implementation[9] 1.2.3 National planning framework for the network of C / MPAs is prepared, including the roles and responsibilities of State, private sector, and communities (diversified by gender) for C / MPAs management clarified 1.2.4 10-Year Business Plan developed and implemented for the expansion and effective management of the network of C / MPAs, including activities on promotion of C / M PAs in the context of sustainable tourism development			

[5] In compliance with Decision IG.22/7 of the Contracting Parties to the Barcelona Convention (Integrated Monitoring and Assessment Programme)
[6] United Nations Convention on Biological Diversity
[7] Ecosystem approach of the UNEP/MAP-Barcelona Convention, in line with Decision IG.21/3
[8] Good environmental status as described in UNEP(DEPI)/MED WG.420/4
[9] In coordination with the soon to be formed National council for sustainable development, climate change and integral coastal zone management (the high-level coordinating body for ICZM) and the country coordination office as part of the Adriatic project

			1.2.5 Awareness of decision-makers on the economic benefits of a well-managed network of C / MPAs, including sustainable use of coastal and marine habitats is increased 1.2.6 Development of the communication strategy to ensure outreach on the activities and benefits of the project for the local, national and international community 1.2.7 Development of an assessment of socio-economic impacts on local population by establishing new C / MPAs			
	TA	1.3 Status of protection for existing coastal PAs covering 13,012.19 hectares revised and plans for expansion of the PA network covering 2,301.2 ha in the coastal area of Montenegro defined[10] *Protection status of up to 13,012.19 hectares of existing coastal PAs revised* *2,301.2 ha planned for protection in the coastal area of Montenegro*	1.3.1 Necessary documents for revision of existing coastal PAs covering 13,012.19 hectares prepared and submitted for adoption 1.3.2 Plans for expansion of the PA network in the coastal area of Montenegro prepared and submitted for adoption			
	TA	1.4 Priority integrated C / MPAs established, namely Platamuni, Katici and Stari Ulcinj covering at least 2,301.2 hectares *Three new integrated C /MPAs proposed for protection of representative coastal and marine ecosystems covering up to 2,301.2 ha* *1.5% increase per annum in habitat*	1.4.1 Study on nature protection and other required documentation for establishing three priority C / MPAs prepared, including zoning applicable for spatial planning documentation. 1.4.2 Consultation process ensuring gender balance provided prior to adoption acts on establishing three new integrated C / M PAs 1.4.3 Legal instruments for establishing the new PAs are prepared and the adoption			

[10] According to Montenegrin legislation, before even initiating the procedure for establishing the PAs, it is necessary to design plans for designating a certain area for protection

		distributional range of Posidonia oceanica as an endangered species and important habitat endemic to the Mediterranean Sea[1112]	requests for the three new C / MPAs are submitted			
2. Management effectiveness is ensured in the C / MPAs in Platamuni, Katici and Stari Ulcinj critical land/seascape	TA	2.1 Improved C/ MPA management effectiveness in three newly established C / MPAs Platamuni, Katici and Stari Ulcinj *27 points increase in PA Management Effectiveness Tracking Tool (METT) scores (Baseline: 23; Target: 50)* [13] *72 points increase in Financial Sustainability Scorecard (Baseline: 43; Target: 115)*	2.1.1 Assessments for setting up management of integrated C / MPAs, including rights-based and co-management agreements for long term financial sustainability in line with the national framework developed 2.1.2 Management Plans for three new C / MPAs developed with integrated Financial strategy to reduce financing gaps 2.1.3 Tourism development area plans developed for three new C / MPAs to be integrated in the spatial planning 2.1.4 Employment of management and staff for the three new C / MPAs facilitated[14] and their capacities raised for effective PA management 2.1.5 A monitoring and enforcement system developed and implemented to reduce threats to biodiversity in C / MPAs and their buffer areas and ensure effective PA management	GEFTF	657,218	4,803,675
		2.2 Lessons learned platform for establishment and effective management of C / MPAs guiding future efforts on expansion of PAs *At least 2 guidelines containing lessons learned published*	2.2.1 Guidelines with lessons learned developed and endorsed by the relevant institutions, including recommendations on changes to national legislation.			
			Subtotal		1,457,218	12,203,675

[11] These estimates are based on the work of Waycott, M. *et al. Accelerating loss of seagrasses across the globe threatens coastal ecosystems*. *P. Natl. Acad. Sci. USA* **106**, 12377–12381 (2009).
[12] Common Indicator 1: Habitat distributional range (EO1) to also consider habitat extent as a relevant attribute, as per Decision IG.22/7, Integrated Monitoring and Assessment Programme of the Mediterranean Sea and Coast and Related Assessment Criteria
[13] Baseline (23) and target score (50) are valid for all three PAs
[14] GEF funds will not be used for staff salaries

Project Management Cost (PMC)[15]	GEFTF	145,722	250,000
Total project costs		**1,602,940**	12,453,675

C. SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE

Please include confirmed co-financing letters for the project with this form.

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount ($)
Recipient Government	Ministry of Sustainable Development and Tourism (MSDT)	In-kind	12,203,675
GEF Agency	United Nations Environment Programme (UNEP)	In-kind	250,000
Total Co-financing			12,453,675

D. TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country Name/ Global	Focal Area	Programming of Funds	(in $)		
					GEF Project Financing (a)	Agency Fee a) (b)[2]	Total (c)=a+b
UNEP	GEF TF	Montenegro	Biodiversity	(select as applicable)	1,602,940	152,279	1,755,219
Total Grant Resources					1,602,940	152,279	1,755,219

a) Refer to the Fee Policy for GEF Partner Agencies

E. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS[16]

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	***35,000 hectares*** *(direct impact on* ***15,313.39 hectares****, the remaining area will be affected indirectly)*

F. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? NO

(If non-grant instruments are used, provide an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF Trust Fund) in Annex D.

G. PROJECT PREPARATION GRANT (PPG)[17]

Is Project Preparation Grant requested? Yes ☐ No ☒ If no, skip item G.

[15] For GEF Project Financing up to $2 million, PMC could be up to 10% of the subtotal; above $2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

[16] Update the applicable indicators provided at PIF stage. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the *GEF-6 Programming Directions*, will be aggregated and reported during mid-term and at the conclusion of the replenishment period.

[17] PPG of up to $50,000 is reimbursable to the country upon approval of the MSP.

PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS*

GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in $)		
					PPG (a)	Agency Fee[18] (b)	Total c = a + b
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
Total PPG Amount					**0**	**0**	**0**

PART II: PROJECT JUSTIFICATION

II.1. *Project Description*. Briefly describe: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, GEF focal area[19] strategies, with a brief description of expected outcomes and components of the project, 4) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing; 5) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 6) innovation, sustainability and potential for scaling up.

Scope & Context

With an area of 13,812 km², Montenegro is mostly mountainous and covers both Sub-Mediterranean and Mediterranean regions. Montenegro is bordered by Bosnia and Herzegovina to the north-west, Serbia to the northeast, Kosovo*[20] to the east, Albania to the east and south-east, Croatia to the west and the Adriatic Sea to the south-west. Its capital and largest city is Podgorica. The population of Montenegro is 620,029 (2011 census).

Montenegro has a service-based economy, and tourism is one of the leading sector of the national economy. Gross domestic product (GDP) of Montenegro in 2015 amounted in total to USD 3.79 million, and GDP per capita is USD 6,924.96[21]. Since June 3, 2006 Montenegro is an independent country that proclaimed its constitution on October 22, 2007. Based on the Declaration of "Montenegro as an Ecological State", which was adopted by the Parliament in 1991, the provision on ecological state is also integrated in the 2007 Constitution. The country is currently implementing a wide range of political and economic reforms, including the process of integration into the EU, following the signature of the Stabilization and Association Agreement. The process of EU accession thus plays a particularly important role in the development of nature conservation regulations.

Montenegro has 293 km of coastline along the Adriatic Sea and its maritime zone extends up to 12 nautical miles offshore covering an area of about 2,500 km², with a maximum depth of 1,233 m. The width of the continental shelf (up to 200 m depth) varies along the coast of Montenegro, extending to 9.5 nautical miles at the entrance of Boka Kotorska Bay, and 34 nautical miles at the River Bojana estuary. Montenegrin Sea consists of two substantially different areas judging by their geographic, hydrographic and oceanographic characteristics: the Boka Kotorska Bay and the open sea extending from the coast line. The total surface of the marine water area is 6,347 km^2, and the territorial sea around sums up to 2,100 km^2 (out of which 89 km^2 in Boka Kotorska Bay). Maximum registered amplitude of change in the sea level due to tide is 131 cm.

[18] PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

[19] For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which Aichi Target(s) the project will directly contribute to achieving.

[*] This designation is without prejudice to positions on status, and is in line with UNSC 1244 and the ICJ Opinion on the Kosovo Declaration of Independence.

[21] Montenegro Statistical Agency (MONSTAT), 2015

Figure 1. Map of coastal area of Montenegro with three proposed sites marked in red

Due to its high diversity of geologic formations, variety of climate, landscape, and land resources, but also for its critical geographical position in Northern Mediterranean, Montenegro provides numerous biological "hot-spot" locations that are important both in Europe and worldwide. The immense diversity of the country's landscape has been partly illustrated in this short official video that was made by the Ministry of Sustainable Development and Tourism (MSDT) (please see here: https://vimeo.com/5624380).

At a global level, Montenegro is included within the Mediterranean biodiversity hotspots and the following Global Eco-regions: European-Mediterranean Montane Mixed Forests (no. 77), Mediterranean Forests, Woodlands and Scrub (no. 123), and Mediterranean Sea (no. 199) and the Balkan Rivers & Streams (no. 180); and, together with the mountainous area of Bulgaria, comprises one of the 153 canters of globally significant floral diversity. Montenegro, with more than 3,200 plant species is floristically one of the most diverse areas in the region, comparable only to Greece and Bulgaria. The Simpson (S/A) index[22] of Montenegro for vascular plants is 0.837, which is the highest recorded for all European countries. Similarly, the index of the density of nesting birds in Montenegro has a value of 0.557, which is higher than the figure for the Balkans as a whole (0.435).

Biodiversity assets of Montenegro are distributed in two main bio-geographical regions – Mediterranean and Alpine – and has a very wide range of ecosystems and habitat types for a country of its size. There is a zonation of flora and fauna from the cold mountainous on the north to the warm Mediterranean coast in the southwest. Additionally, biodiversity is influenced by the presence of elements of Alpine flora and fauna on the tops of coastal mountains and the intrusion of warm air and elements of Mediterranean flora and fauna through river valleys and canyons into the mountains in the continental part of Montenegro. Due to the refugia character of these "sheltered" habitats, there is a considerable endemism[23] in Montenegro with dominant Central European, Iliric, Alpine and Mediterranean elements to the flora and fauna. Montenegro also has identified Important Bird Areas, which include Skadar Lake, Ulcinj Saltwork, Tivat Salina, Bojana River delta, Rumija, etc.

Marine and coastal ecosystems

Coastal zone of Montenegro is covering the territory of 6 coastal municipalities (Herceg Novi, Tivat, Kotor, Budva, Bar and Ulcinj), and is characterized by a high degree of diversity and specific habitats and species. Great number of coastal habitats of international importance (including marshy habitats) is present in the Ulcinj region with its hinterland and in certain parts of the Boka Kotorska Bay. Unique halophytic vegetation can be found on the sand dunes in the area of Ulcinj. Areas near Ulcinj and Tivat are the localities with halophytic vegetation on muddy-clay grounds of great importance. This

[22] S / A index is a (numerical) value that reflects the ratio of the number of species per unit area, in case of Montenegro it is the ratio of the number of plant species in Montenegro (> 3,300) and the surface area (13,812 km^2).
[23] For instance, 223 endemic plant species and sub-species are registered for Montenegro.

type of vegetation has almost disappeared from the eastern coast of the Adriatic. Specific fauna, particularly rich birdlife, is also typical for this vegetation.

The Montenegrin coastline is characterized by rocky cliffs with 117 natural sandy and rocky beaches situated in between, and 8 small islands (including St. Nikola near Budva, Katici near Petrovac, Stari Ulcinj and Ada Bojana). Beaches cover 73 km of the coastline. The longest beach is at Ulcinj, which is over 12 km long, and in places fringed with sand and gravel dunes with halophyte vegetation. Its hinterland is covered with typical Mediterranean macquis, garrigue and degraded evergreen woodland that extends up the southern slopes of some coastal mountains, but also has salinas and saltpans and agricultural areas of largely olive groves and citrus fruit orchards. Characteristic vegetation includes typical Mediterranean species such as Evergreen Oak *Quercus ilex*, Kermes Oak *Quercus coccifera*, Viburnum *Viburnum tinus*, Holly tree *Phillyrea media*, Coastal Juniper *Juniperus oxycedrus*, Big Heath *Erica arborea*, Evergreen Pistachio *Pistacia lentiscus*, Strawberry tree *Arbutus unedo*, Rockrose *Cistus villosus* and *Cistus salviaefolius*, Spanish Broom *Spartium junceum*, Myrtle *Myrtus communis*, Olive *Olea europea*, Smilace *Smilax aspera*, Blackberry *Rubus ulmifolius*, Flowering Ash *Fraxinus ornus*, Fig *Ficus spp*, and Hornbeam *Carpinus spp*., and a range of medicinal plants such as Sage *Salvia officinalis* and Laurel *Laurus nobilis*. Some rare and endemic species with limited range of distribution are also present here, including Skadar Oak *Quercus robur spp. scutariensis*, as well as some unusual plant associations, e.g. *Andropogoni – Nerietum* above the Well Sopot near Risan. The commercial Ulcinj Salina together with the neighbouring swamps and lagoons comprise an important over-wintering area for waterbirds.

Marine benthic communities are diverse and typical of the infralittoral of Mediterranean hard and soft substrates. In marine flora dominate algae (planktonic and seaweeds), which support extensive seagrass *Posidonia oceanica* and *Cymodocea nodosa* beds. These plants serve as nursery shelter areas for many larvae and juvenile forms of marine fauna. The fauna of Montenegrin part of Adriatic Sea has not been fully investigated yet, but according to recent data there are over 300 species of algae, 40 species of sponges, 150 species of crustaceans, 340 species of molluscs, and almost 400 species of fish, with 3 species of marine turtles and 4 species of dolphins24. Several species of whales are also occasional visitors. Most of the known species are distributed along the littoral zone (up to 200m deep), but some of them are found in the transition zone to the bathyal zone (200-300m deep), such as the Norway lobster Nephrops norvegicus and petrified sponge (*Thenea muricata*). The area around Boka Kotorska Bay, which is an important spawning site and probably the best-studied area biologically, has a number of rare species such as the molluscs *Tijsira orahoviciana* and *Mitra zonata*. Bojana estuary is important nutrition place for migratory birds as well. The marine ecosystem is characterized by Northern Mediterranean and Adriatic species. Apart from algae flora, seaweed meadows of global importance, the *Posidonia oceanica* and *Cymodocea nodosa* can be found in coastal waters of the Montenegrin Sea. A substantial number of animal species is linked to their life cycle.

Posidonia oceanica is the most important endemic seagrass species of the Mediterranean Sea and it is declining at alarming rates due to climate change and human activities. *P. oceanica* has been selected as representative species of the angiosperm quality elements for the Mediterranean marine environment.[25] Only the 4% of Posidonia formations across the Mediterranean basin are presently protected within the already established MPAs[26].

- *Marine algae*

Over 300 species of macro algae have been recorded in Montenegrin waters (although there are likely to be many more), the majority of which are red algae (*Rhodophyta*), comprising 202 (66.5%) of recorded species in spring and summer surveys, followed by *Phaeophyceae* (60 taxa, 19.7%) and *Chlorophyceae* (42 taxa, 13.8%). Most of these species are widespread in the Atlantic and the Mediterranean (Atlantic-Mediterranean 57.5%, Mediterranean endemic 26.1%), and only 4.3% are endemic to the Adriatic Sea. *Lithophyllum lichenoides* can be found near Platamuni, while *Padina pavonica* and *Codium sp.* are located near Stari Ulcinj.

- *Marine invertebrates*

[24] Regner, S., Vukanic, D., Vuksanovic, N., Jerkovic, L., Kljajic, Z., Mandic, S., Macic, V., Milojevic, S., Radovic, I. & Regner, D., 2003: Geneticki resursi morskih organizama. Jugoslovenska inzenjerska akademija, Bulletin no. 1., Belgrade

[25] Telesca, L. et al. Seagrass meadows (Posidonia oceanica) distribution and trajectories of change. Sci. Rep. 5, 12505; doi: 10.1038/srep12505 (2015).

[26] Mediterranean Sensitive Habitats (2013). Edited by Giannoulaki M., A. Belluscio, F. Colloca, S. Fraschetti, M. Scardi, C. Smith, P. Panayotidis, V. Valavanis M.T. Spedicato. DG MARE Specific Contract SI2.600741, Final Report, 557 p.

The existing data suggest relatively high diversity, although low endemism (in common with the rest of Adriatic Sea). For instance, some 50% (50/101 species) of all the Echinoderms (*Echinodermata*) occurring in the Adriatic Sea are recorded in Montenegro, 127 species of bivalves have been reported from the inner part of Boka Bay, with an estimate of 250-300 species in the Montenegrin waters, and 17 species of cephalopod (*Sepia officinalis, Sepia elegans, Sepia orbignyana, Sepietta oweniana, Sepiola rondeleti, Illex coindetii, Loligo vulgaris, Octopus vulgaris, Octopus salutii, Eledone moschata, Eledone cirros, Alloteuthis media, Rossia macrosoma, Scaeurgus uncirrhus, Pteroctopus tetracirrhus* and *Todarodes sagitatus*) that have been recorded in the open part of the Montenegrin coast. Species like *Centrostephanus longispinus, Ophidiaster phidianus, Litophaga litophaga, Luria lurida, Pinna nobilis* and *Tonna galea* can be found in a single site around Katici islands. In the area of Platamuni even vulnerable species like *Palinarus elephas* can be found.

Commercially exploited species include Squid (*Loligo vulgaris*) and Cuttlefish (*Sepia officinalis*), which comprise the majority of the Cephalopod catch in Montenegrin waters, as well as species of crab and shrimp (*Crustacea*), e.g. the Shrimp *Parapenaeus longirostris*, and several bivalve species (*Mollusca*). However, despite their commercial importance, the ecology of these groups is still rather poorly known.

- *Marine fish*

The marine fish fauna of the Montenegrin part of Adriatic Sea is considered diverse with 117 recorded families, and has a low level of endemism. To date, 4,079 species have been recorded in Montenegro, which represents around 70% of the total number recorded in the Mediterranean. The habitats richest in fish species (both in terms of diversity and biomass) are the drop offs and reefs of the near-shore coastal zones, e.g. areas of Katici, Platamuni and Stari Ulcinj, which provide high structural diversity and different microhabitats for fish. Several vulnerable and endangered species are identified in the waters of Montenegrin Sea, including *Cetorhinus maximus, Carcharodon carcharis* near Katici, and *Epinelhelus marginatus, Mobula mobular* near Platamuni. *Posidonia Oceanica*, which can be found in shallow waters near the coast line (up to 33 m in depth) in areas of Stari Ulcinj island, Platamuni and Katici and they provide important nursery areas for young fish.

- *Birds*

Montenegro is located at the Adriatic flyway, major migratory route for birds. High diversity of natural habitats is resulting in high avian diversity as well. Out of a total of 526 European bird species, 333 can be found regularly in Montenegro, and several additional species are registered as occasional visitors and the current total number of species in Montenegro is 326[27]. Out of these, 204 species nest in the country. Montenegro has a wide variety of bird types, including many raptors, forest and wetland species, and provides an important refuge for a number of rare and threatened bird species, including Dalmatian Pelican (*Pelecanus crispus)* and Pygmy Cormorant (*Phalacrocorax pygmeus)*. Important bird sites are mainly located in the area around Ulcinj in the southern part of the Montenegrin coast.

- *Mammals, reptiles and amphibians*

Among marine mammals, the following are registered: Common Dolphin *Delphinus delphis*, Striped Dolphin *Stenella coeruleoalba*, Bottlenose Dolphin (*Tursiops truncatus)*. The coastal region of Montenegro and its hinterland, including Platamuni and area around Ulcinj are considered as most significant centres of biodiversity of Reptiles and Amphibians in Europe. Some of the species present at the sites include *Myotis capaccinii, Rhinolophus euryale Blasius,* both listed in the IUCN list of threatened species[28].

Importance of Coastal and Marine biodiversity at local and national level

Biodiversity and ecosystem services contribute to socio-economic development and human wellbeing in numerous ways. In Montenegro, they are important factors for preservation of water abundance and quality, protection from natural hazards such as flooding and erosion, and climate regulation. At the same time, they are contributing to food production (fishing, collection of edible wild species, soil fertility, agro-biodiversity) and play an important role in providing recreational services and in maintaining attractiveness of the country, both of which are significant for tourism development. Serving as a source of additional income and by supporting traditional economic activities of rural population, biodiversity is also important for livelihoods of a number of local communities in the country. Moreover,

[27] There are no adequate data in literature on the total number of birds in Montenegro, except for data for regular appearance of 333 bird species at the territory of Serbia and Montenegro together (Vasic, V, I. (1997): Biodiverzitet Jugoslavije – Pregled vrsta od međunarodnog znacaja. Ecolibri, Beograd)

[28] However, more research is necessary.

ecosystems provide multiple benefits to human health and have important traditional and cultural values (Fifth National Report to the UNCBD, 2014).

Fishing represents an important activity in the coastal Montenegro, for traditional communities and in recent years, increasingly for the newcomers as well[29]. The fishing activities are being carried out throughout the year and could be used for both commercial and recreational purposes. Most important fishing areas include Katici, Platamuni and Stari Ulcinj, among others. The areas are rich in commercially-valuable species of fish, including *Dentex dentex, Homarus gammarus, Palinurus elephas, Merluccius merluccius, Sphyraena sphyraena* and other. As most of the fishermen do not have valid licence for fishing (due to administrative and financial reasons), they are not eager to share details on the amount of catch, so it is impossible to estimate the average amount of fish caught in certain areas[30]. The variety of sea bottom, from sandy to rocky bottoms to reefs that still exist in certain parts (in some are destroyed due to use of explosives for catching fish) are very convenient for fishing due to abundancy of commercial fish species. Echosurveys undertaken in several localities in Montenegro were used to make an average estimate of biomass of demersal resources in the period f 2004-2011 and showed an increasing trend from 128.38 tons in year 2004 to 610.83 tons in year 2011[31]. One of the possible reasons of the increase of the biomass is due to the decrease of active trawlers in Montenegro. Also, as a part of this biomass there is a significant value of high proportion of Elasmobranchs such as *Scyliorhinus canicula* and *Raja miraletus*, which have been dramatically reduced toward the extinction in many other Mediterranean areas. This indicates better condition of the Montenegrin fish community and a high biodiversity and at the same time the necessity to preserve the current richness of the Montenegrin sea[32]. It was observed that throwing dynamite, illegal fishing and night fishing with bottles and underwater lights are a chronic problem in all locations of the open sea of Montenegro. The fishery sector currently employs 631 people and represents 0.5% share in gross national product of Montenegro[33], but is also one of the two main sources of livelihoods for the local communities.

Date shells are also being collected extensively in the coastline of Montenegro. They are being collected once the rock they have been attached to has been demolished mechanically. This kind of destructive fishery increases the amount of stone blocks, gravel and sand at the bottom of the cliff and triggers a change in the state of the system from forested to barren. This action, coupled with overfishing, which dramatically reduces the size and number of predatory fish, is at the base of the proliferation of barren habitats dominated by sea urchins in shallow Montenegrin waters. Indeed, fishing with explosives is a plague for Montenegro, and has led to the impoverishment of predator fish assemblages.

Furthermore, the impact of these negative effects are felt in the last five years in terms of reduction of the catch and the number of species, as most fishermen believe that the catch has been reduced for 40-60% in the last five years, depending on the location. Solving the problem of waste water flowing directly into the sea without any treatment must also be a priority in order to preserve existing resources in these areas[34].

However, the livelihoods of the local fishery communities depend greatly on the exploitation of the fish and any regulations on reduction in catch may adversely affect local families that live from the fishing.

Preserved ecosystems and species diversity offer aesthetic and cultural values represent a basis for recreational activities and tourism in Montenegro. Coastal and marine ecosystems with related species diversity are a precondition for development of tourism as one of the key economic sectors in the country. Construction of tourist capacities and residential/ vacation facilities in the coastal areas in the central have been driven by high market demand for tourism and attractively located real estate (Fifth National Report to the UNCBD, 2014). The tourism sector in 2013 employed 14,333

[29] Fishery activities assessment in Montenegro: Case study of five selected parts of Montenegrin coast, RAC/SPA - UNEP/MAP, 2013

[30] Fishery activities assessment in Montenegro: Case study of five selected parts of Montenegrin coast, RAC/SPA - UNEP/MAP, 2013

[31] Fishery activities assessment in Montenegro: Case study of five selected parts of Montenegrin coast, RAC/SPA - UNEP/MAP, 2013

[32] Fishery activities assessment in Montenegro: Case study of five selected parts of Montenegrin coast, RAC/SPA - UNEP/MAP, 2013

[33] B. Bulatovic MoARR, Country presentation

[34] Fishery activities assessment in Montenegro: Case study of five selected parts of Montenegrin coast, RAC/SPA - UNEP/MAP, 2013

people[35] and in 2014 represented 9.5% of the total GDP[36]. Tourism is especially developed in the coastal area of Montenegro and is the main source of employment for local communities.

Nevertheless, the level of awareness on the values and significance of ecosystem services is still rather low. Real costs related to the use of ecosystem products and services are often underestimated or not taken into account. Because of this reason, cases of degradation and loss of ecosystem services have been recorded. In the coastal region, urbanisation and tourism development have led to destruction of natural habitats and have diminished the level of services provided by these areas (Fifth National Report to the UNCBD, 2014).

PA system in Montenegro (development, position of C / MPAs, institutional structure)

The existing national biodiversity monitoring programme provides significant inputs for the revision of the conservation status of many species, and the new List of the Protected Species has been adopted in December 2006 (Decree on the protection of certain flora and fauna species, Official Gazette of MNE, No. 76/06) after 25 years. The number of protected species increased, where only 6 plant species were under protection in 1968, and 52 plant species and 314 animal species were protected in 1982. After its last revision in 2006, the number of protected plant and animal species in the List increased to 415 and 430, respectively.

The national efforts for conservation of biodiversity and natural assets resulted in the designation of several PAs under successive nature protection laws. The coverage of national PAs currently amounts to 176,117.565 ha or 12.75% of the land area of Montenegro. The country's five national parks Durmitor, Skadar Lake, Lovcen, Biogradska gora and Prokletije are the most important PAs. The other PAs (more than 50), fall under different categories such as monument of nature, area of exceptional natural values, individual dendrological objects and general and special nature reserves.

Nature Protection Law (2008, 2013) defines following types of PAs:

- Strict and special nature reserves
- National park
- Regional park and nature park
- Natural monument
- Protected habitat
- Area of exceptional natural values

PAs[37] in general, thus including the C / MPAs as well, are classified into three categories:

Category I – PA of extraordinary importance: includes protected natural assets having one or more of features of exceptional importance for Montenegro.

Category II – PA of great importance: includes protected natural assets having one or more features of great importance for Montenegro.

Category III – includes significant PAs that are not classified into categories I and II.

However, these categories are not standardized in accordance with IUCN criteria. According to Article 53 of the Nature Protection Law categories identified for PAs can be revised depending on the state of scientific knowledge.

Article 54 is related to regulation of protection zones:

- Protection regime of first degree - strict protection is carried out in a protected natural asset with exceptional ecological significance or its part with slightly altered characteristics, by which natural biological processes, preservation of the integrity of habitats and living communities and extremely valuable cultural assets are enabled.
- Protection regime of second degree - the active protection is carried out in a protected natural asset with partially altered properties of natural habitats, but not to levels that threaten their functional and ecological significance, including valuable lands.

[35] Monstat, Statistical Yearbook for 2015, data for 2013
[36] World Travel and Tourism Council, Economic Impact 2015 Montenegro, 2015
[37] Defined as "protected natural assets" in the Law on Nature Protection (2008, 2013)

- Protection regime of third degree - sustainable use is carried out in a protected natural asset or part of it with partially modified and/or altered habitat characteristics that enable a functioning ecological connectivity and integrity of protected natural resource.

On the other hand, due to their importance for coastal zone biodiversity, several individual dendrological objects (monumental trees) have also been protected. In a situation where boundaries of the existing PAs are not defined precisely, the available data has been analysed in CAMP[38] by using GIS. Based on the results obtained, it has been acknowledged that the share of existing nationally protected coastal (terrestrial) PAs in the overall surface of 6 coastal municipalities amounts to 8.6%, which is 13,012.19 ha out of 150,423.09 ha of total coastal area[39]. The existing coastal PAs include all public beaches (19 beaches), which together with five other areas are protected as monuments of nature. Further on, there is one nature reserve (Tivat Salina), three areas of special natural features and one area protected by municipal decision (Kotor-Risan Bay).

Identification of potential C / MPAs

The share of areas that were identified as important for protection (but have not been protected so far) amounts to 18.8%. Marine areas important for protection have also been approximately defined, taking into account the sites recognized by the Spatial Plan of Montenegro (2008) and the Special Purpose Spatial Plan for the Coastal Zone of Montenegro (2008), which contain proposals for placing under protection new PAs that should integrate ecological values of both coastal (terrestrial) and marine ecosystems, as well as the sites identified through research projects implemented so far (see chapter 2.1.). The overall surface of these areas amounts to approx. 9,000 ha (including marine areas and corresponding coastal belts). Potential coastal and marine PAs (hereinafter: C / MPAs) sites include the following zones and localities: Lustica (from Mamula to Macak Cape), zone from Traste Cape to Platamuni (with a narrow zone of strict protection from Zukovac Cape to Kostovica Cape, wider zone of Katici Isle, zone from Volujica Cape to Dobre vode, zone from Komina Cape to cape by Stari Ulcinj island, Valdanos cove zone to Velika cove and Seka Djerane with the southern part of the zone in front of Velika beach to Bojana River mouth. Designation/establishing of three priority C / MPAs has been identified and proposed in the Special Purpose Spatial Plan for the Coastal Zone of Montenegro (2008) as nationally most relevant C / MPA sites and these include Platamuni, Katici islands and Stari Ulcinj Island.

Two projects that have been previously initiated in order to further investigate the biodiversity value and needs for protection of Platamuni and Katici are “Strengthening the sustainability of the protected area system of Montenegro” - GEF funded project, carried out by UNDP in 2009 and “Management Plan ‘Katic’ Pilot Marine Protected Area Montenegro” developed by DFS Engineering Montenegro in the period of 2009-2010 in the frame of the Italian-Montenegrin cooperation. DFS survey campaign has been expanded (to become the MPA2 project) in order to identify other areas with significant and valuable marine ecosystems, as potential C / MPAs. The following 7 areas were identified in the survey: Mamula bay down to Cape Macka; Cape Traste to Platamuni; Katici Islands; Cape Vulujica to Dobra Voda town; Cape Komina to Cape Stari Ulcinj; Valdanos Bay to Velika Plaza; and Seka Djerane and southern Velika Plaza to the Bojana delta.

Unfortunately, over the last couple of decades, there were no new designations of PAs in the coastal Montenegro, with the exemption of Tivat Salina nature reserve that was established in 2008. Montenegro is the only country in the whole Mediterranean region that has no nationally proclaimed C / MPA.

The process of establishment of the C / MPAs stated with the identification as a priority action in several national strategic documents, including the National Action Plan for implementation of the Strategic Action Plan for Biodiversity in the Mediterranean region from 2005 (UNEP/MAP, SAP/BIO[40]), National Strategy on Sustainable Development from 2007 and the Biodiversity Strategy and Action Plan under the umbrella of UN CBD from 2010. The identification of the sites has been so far well documented and based on solid consultations with stakeholders and thus builds solid basis for further action. Concerning the international designations, Montenegro has two Ramsar sites: Skadar Lake since 1995 and Tivat Salina since 2013, as well as two UNESCO - World Heritage sites: Durmitor with Tara Canyon since 1980 and Kotor - Risan Bay since 1979. In addition, several marine and coastal areas were included in the list of Emerald candidate sites as follows: Kotor-Risan Bay, Platamuni, Katici islands, Donkova and Velja Seka, Tivat Salinas, Buljarica, Hill Spas,

[38] Coastal Area Management Programme
[39] NS ICZM, CAMP
[40] Strategic Action Programme for the Conservation of Biological Diversity in the Mediterranean Region of UNEP/MAP-Barcelona Convention

Pecin, Velika Plaza and Ulcinj salt works. The initial list of Emerald sites was defined in 2008 and the proposal was verified by the Standing Committee of the Bern Convention in 2012.

UNEP/MAP Regional Activity Centre for the Specially Protected Areas (RAC/SPA) supported the implementation of the surveys on marine biodiversity (benthic and fish communities)[41] in 2008, 2011 and 2012 at more than 20 locations and identified the following three areas for establishing the first C / MPAs:

- **KATICI** - area between Skocidjevojka Cape and Dubovica has been identified as valuable for protection, from the coastline into the sea in depth of about 50 m. Highest status of protection should be given to the small islets, St. Nedelja and Katici, as highlighted by DFS surveys in 2009-2010. This site is valuable for protection due to globally and regionally important *Posidonia Oceanica* meadows, but also because of the fish assemblages with the three fish species most abundant in population: *Diplodus vulgaris, Coris julis* and *Serranus scriba.* The area is also visited by *Carcharodon carcharias,* endangered fish species, as shown in the table below. *Posidonia oceanica* has an ecological but also conservation importance due to its regression in the Mediterranean Sea. The area covered by Posidonia (extending to depths of 33 m), which is also very relevant from the perspective of important habitats for young fish, amounts to 356 hectares.
- The status of *Posidonia oceanica* meadows is considered a good biological indicator of sea water quality and it is also used for assessing the health status of marine coastal environment. The good status of Posidonia meadows reverberates on surroundings where there are many vegetal and animal species, listed as endangered or protected (Annex II, Dir. CEE 43/1992). The *Posidonia oceanica* meadow has a good healthy status, especially around Katici islets and from Dubovica to Crni Cape. The density and the covering display high values ranged 327 to 420 shoots per m^2 and with a cover usually exceeding 80% at the intermediate depth of the meadow (about 15 m)[42].
- The area also hosts several remarkable and nationally protected species, such as *Epinephelus spp., Ophidiaster ophidianus, Hippocampus ramulosus, Cystoseira amentacea, Tonna galea, Litophaga litophaga, Scyllarus arctus, Scyllarus latus* and *Pinna nobilis*. Apart from protected habitat with wider distribution in this area, such as *Posidonia oceanica* and, to smaller extent, *Cymodocea nodosa,* there are also very important features such as marine caves, coralligenous formations and beach-rock formations. Taking into account the marine protected species, in addition to the depleted stock of date mussels, a total amount of eight nationally protected species were found within algae, molluscs, crustaceans, echinodermus and fishes. Visual census in the area resulted in observation of up to 72 species, including the occurrence of fish species not so frequently observed in other geographical areas (*Labrus bimaculatus, Scorpaena maderensis*). The information on fish density underlines a very poor condition of the fish assemblage, especially considering the species of commercial and touristic interest. Taking into account the size structure of the fish assemblage, the composition is poor mainly due to small specimens that put in evidence the high fishing pressure on fish population in the area. The coastal area around Katici shows an ecological good balance in terms of habitat complexity and biodiversity and for these reasons, this area is worth preserving and protecting[43].
- The area around Katici is one of the four main Montenegrin fisheries sites. Starting from the early 90s fishing has increased all along the country's coast. Impact on marine ecosystems is growing due to illegal and unsustainable fishing practice, e.g. date mussels harvesting, fishing with explosives and illegal trawler fishing are the highest concern in this area[44]. Several species of high commercial value are present, such as groupers (*Epniephelus spp*.), breams (*Diplodus spp., Sparus aurata*), wrasses (*Labrus spp.),* and etc.[45]. Many species are found in low abundance and small size of specimen, which is the likely result of overfishing and illegal fishing practices.

[41] Rapid assessment survey of coastal habitats to help prioritize the suitable new areas needing a status of protection for the development of a network of Marine and Coastal Protected Areas in Montenegro. RAC/SPA - UNEP/MAP, 2011, c 2014
[42] Katic MPA Management Plan, 2010
[43] Katic MPA Management Plan, 2010
[44] Katic MPA Management Plan, 2010
[45] Katic MPA Management Plan, 2010

Figure 2. Katici

Table 1. Identified species in the area of Katici with reference to IUCN conservation status, if any

Identified species in the area of Katici[46]
Plants: *Posidonia oceanica (LC), Cystoseira amentacea, Cystoseira spinose*
Invertebrates: *Centrostephanus longispinus, Ophidiaster ophidianus, Lithophaga lithophaga, Luria lurida, Pinna nobilis, Tonna galea*
Fish: *Diplodus vulgaris (LC), Coris julis (LC), Serranus scriba (LC), Cetorhinus maximus(VU), Carcharodon carcharias (VU), Epniephelus spp., Diplodus spp., Sparus aurata, Labrus spp., Labrus bimaculatus, Scorpaena maderensis*
Habitats: Posidonia beds *(Posidonia oceanica) – EUNIS Annex I, Code 1120*
Species / Habitat classification
Emerald: "Katici, Donkova and Velja Seka islands" (Code: ME000000Y) – 439 hectares. Resolution 4: A2.61 Seagrass beds on littoral sediments
Natura 2000: Annex I: 11.34

- **PLATAMUNI AND ADJACENT REEFS** - area between Seka Albaneze and cape Platamuni has been identified as valuable for protection, from the coast to a depth of about 50 m. Highest level of protection should be given to the

[46] Listed species are identified through a variety of surveys conducted in last 10 years

outcrop of Seka Albaneze and the surrounding areas. Extension of this MPA could include Kostovica Cape towards the south, and at least 1km of coast to the north of Seka Albaneze. High protection status is also suggested for Seka Kociste towards the north, in Traste Bay, and to the offshore part of St. Nikola southwards, in Budva Bay. This site is also representative for protection due to the *Posidonia* meadows (at localities Cape Platamuni, Zukovica Bay with Seka Albaneze) that is accompanied by *Cymodocea nodosa* at some locations. Marine caves in the area of Platamuni are important for conservation as habitats (code 8330 - Submerged or partially submerged caves), as listed in Annex I of the EU Habitat Directive (92/43/EEC). Ecological significance of marine zone of Platamuni has been previously recognized in the frame of the project "Establishment of Emerald network in Montenegro" (2005-2008) funded by the Council of Europe, with the aim of implementing the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention). Marine area around Katici with Donkova and Velja Seka was also identified as Emerald sites. However, up to date, this PA was not established.

- Apart from *Posidonia* and *Cymodocea*, at this site several globally and regionally important species are registered, such as: algae *Cystoseira spinose* and *Lithophyllum lichenoides,* sponge *Axinella demicornis,* chorale *Cladocora caespitose,* echinoderms *Centrostephanus longispinus, Paracentrotus lividus, Ophidiaster ophidianus, Holothuria forskali, Holothuria polii, Holothuria tubulosa*, molluscs *Lithiphaga lithophaga, Pinna nobilis, Luria lurida, Tonna galea,* crabs *Scyllarides latus, Scyllarus arctus, Palinurus elephas, Homarus gammarus* and fish *Epinephelus marginatus.*

- This area is characterized by a strong rocky substrate, with only three small gravel beaches. The rest of the area is presented by a bedrock, where particularly interesting is the southern part of the high cliffs reaching up to tens of meters. In addition, the cliffs above sea level in some places continue almost vertically under the water as well, which creates a specific habitat for many organisms. The supralythoral is few meters wide, which mostly continues to the well-developed maquis. Mediolittoral is due to the steepness of the descent rocks relatively narrow. It abounds in algae settlements of *Cystoseira amentacea,* which demonstrates the good quality of sea water and no disruption in habitats. These settlements are either continuous or in small groups and places and mixed with *Cystoseira compressa*. In addition to these biocenosis builders in the mediolittoral there is a whole range of other organisms, of which the most important to be mentioned is *Mytilus galloprovincialis*. The large number of especially young mussels that epiphyte on the algae of the genus *Cystoseira* point to the successive changes that aggravate these biocenoses[47]. It is not yet confirmed with certainty but it is very likely that a large number of larvae of mussels come with currents from the southern parts of the Adriatic Sea, where there are a number of growing areas of this kind (especially in coast of Albania). Mussels as species with larger environmental potential can squeeze out the algae of the genus *Cystoseira*, especially the sensitive species of *C. amantacea*. However, due to the physical non-disturbance of habitats in this area (in terms of new infrastructure on the coast or filling the coast) and a good quality of sea water, community of *C. amentacea* is still resistant to the effects of opportunistic species such as mussels. In addition to these dominant molluscs, as a number of predators in this area there are also starfish *Coscinasterias tenuispina* and snail *Stramonita haemastoma*[48].

- In vertical terms, after a narrow zone of mediolittoral and very satisfactory condition of communities of brown algae, rocky substrate generally continues with a degraded form of rocky biocenosis, so-called barren. At these locations rocky substrate is partially covered with calcified algae, while other representatives of algae are very rare or completely absent. Dominant species are the sea urchins *Paracentrotus lividus* and *Arbacia lixula,* and in some places the sponge *Chondrilla nucula*. In the area of Seka Albaneze the bottom is largely covered with algae of the genus *Cystoseira, Sargassum* and *Dyctiotales*[49].

- Large barren areas are the result of overfishing (often with explosive devices) as well as of the excessive and illegal collecting of lithophaga shells. Their collecting leads to changes in the structure of the substrate which causes changes in the composition and structure of benthic communities. Changing the structure of the habitat when the rocks turn into stones and sand along with excessive fishing leads to qualitative and quantitative changes in fish populations. Later on, significant reduction in size and number of predatory fish species leads to an increase in the number of sea

[47] Macic & al., 2010
[48] Platamuni Feasibility Study, 2015
[49] Platamuni Feasibility Study, 2015

urchins, and they again serve to reduce the number of algae and slow down the recovery of rocky habitats that are destroyed by breaking rocks for gathering date mussels[50].

Figure 3. Platamuni

Table 2. Identified species in the area of Platamuni with reference to IUCN conservation status, if any

Identified species in the area of Platamuni[51]
Plants: *Posidonia oceanica (LC), Cymodocea nodosa (LC), Cystoseira spinose, Cystoseira amentacea*
Algae: *Lithophyllum lichenoides*
Sponge: *Axinella damicornis*
Chorale: *Cladocora caespitose*
Invertebrates: *Centrostephanus longispinus, Paracentrotus lividus, Ophidiaster ophidianus, Holothuria forskali (LC), Holothuria polii, Holothuria tubulosa (LC), Lithophaga lithophaga, Luria lurida, Pinna nobilis, Tonna galea, Scyllarides latus (DD), Scyllarus arctus (LC), Palinurus elephas (VU), Homarus gammarus (LC)*

[50] Platamuni Feasibility Study, 2015
[51] Listed species are identified through a variety of surveys conducted in last 10 years

Identified species in the area of Platamuni[51]
Fish: *Epinephelus marginatus (EN), Cetorhinus maximus (VU), Carcharodon carcharias (VU), Mobula mobular (EN)*
Habitats: Posidonia beds (Posidonia oceanica) – EUNIS Annex I, Code 1120 East Mediterranean pre-desert scrub (*Euphorbia dendroides*) – Annex I Code 32.217 *(92D0)* *Southern riparian galleries and thickets (Nerio-Tamaricetea and Securinegion tinctoriae) - Annex I Code 44.8 (5330)*
Species / Habitat classification
Emerald: "Platamuni" (Code: ME000000Z) – 1968 hectares. Resolution 4: A2.61 Seagrass beds on littoral sediments
Natura 2000: Annex I: 11.34, 5330, 92D0

- **STARI ULCINJ -** area around island Stari Ulcinj has been identified as valuable from the coast to a depth of about 35-40 m. Highest status of protection is proposed for the area between Kruce and Rep. The site is representative for *Posidonia* (localities Rep, Opaljike, Kruce and coast at Stari Ulcinj), fish and benthic assemblages (mussel beds, *Cystoseira, Padina pavonica, Codium* and *Flabellia*, but also the assemblages at soft bottoms, pebbles, etc.). The area of Stari Ulcinj is one of the poorest researched areas in Montenegro. However, very important species have been spotted in the areas around Stari Ulcinj, which suggests same species are present around the island as well. Further on, the position of the island, which is 150 m away from the coast, gives a perfect position for fish migratory routes, which choose the path between the coast and the island due to the ease of currents. The assemblages of *Posidonia oceanica* have been identified in the area and they cover up to 455 hectares. Stari Ulcinj is a small rocky island with an area of 1.8 hectares. It has not populated and is mainly used for tourism.
- Some of the species recorded during research done by RAC/SPA in 2011 include: *A. imberbis, B. boops, C. chromis, C. julis, D. annularis, D. vulgaris, M. surmuletus* and *S. cabrilla*[52].
- Just like the area of Platamuni, the sea bottom around Stari Ulcinj has showed large percentage of barren and mussel beds[53]. *Posidonia oceanica* is extremely relevant for this area, where the best conserved algal photophilic and sciaphilic assemblages in the country were found[54]. Even though no research has been done to confirm the presence of particular species, the estimates are that certain endangered species, like *Epinephelus marginatus (EN), Cetorhinus maximus (VU), Carcharodon carcharias (VU), Mobula mobular (EN)* must also be present in this area as well due to its particular geography and existence of Posidonia, which in other cases has been proven to provide habitat for important fish species. Based on several assessments, including the recent research by RAC/SPA[55], this area was identified as an area with significant conservation value.

[52] Rapid assessment survey of coastal habitats to help prioritize the suitable new areas needing a status of protection for the development of a network of Marine and Coastal Protected Areas in Montenegro. RAC/SPA - UNEP/MAP, 2011, c 2014
[53] Rapid assessment survey of coastal habitats to help prioritize the suitable new areas needing a status of protection for the development of a network of Marine and Coastal Protected Areas in Montenegro. RAC/SPA - UNEP/MAP, 2011, c 2014
[54] Rapid assessment survey of coastal habitats to help prioritize the suitable new areas needing a status of protection for the development of a network of Marine and Coastal Protected Areas in Montenegro. RAC/SPA - UNEP/MAP, 2011, c 2014
[55] Rapid assessment survey of coastal habitats to help prioritize the suitable new areas needing a status of protection for the development of a network of Marine and Coastal Protected Areas in Montenegro. RAC/SPA - UNEP/MAP, 2011, c 2014

Figure 4. Stari Ulcinj Island

Table 3. Identified species in the area of Stari Ulcinj with reference to IUCN conservation status, if any

Identified species in the area of Stari Ulcinj [56]
Plants: *Posidonia oceanica (LC), Cystoseira sp, Dracunculus vulgaris (LC)*
Algae: *Padina pavonica, Codium sp,*
Fish: *Epinephelus marginatus (EN), Cetorhinus maximus(VU), Carcharodon carcharias (VU), Mobula mobular (EN)*[57]*, Apogon imberbis (LC), Boops boops (LC), Chromis chromis (LC), Coris julis (LC), Diplodus annularis (LC), Mullus surmuletus (LC), Serranus cabrilla (LC)*
Habitats: Posidonia beds (*Posidonia oceanica*) – EUNIS Annex I, Code 1120
Species / Habitat classification
Emerald: Resolution 4: A2.61 Seagrass beds on littoral sediments
Natura 2000: Annex I: 11.34

Importance of Katici, Platamuni and Stari Ulcinj

[56] Listed species are identified through a variety of surveys conducted in last 10 years
[57] Not confirmed

Katici, Platamuni and Stari Ulcinj area have potential for housing bigger fish populations because of their high habitat complexity and satisfactory fish species richness. However, it is necessary to implement protection measures involving establishment of no-take areas and buffer zones in order to recover fish abundance at least in these sectors of the Montenegrin coast[58]. The three areas have not been yet fully explored and require further research on identifying the species with regular presence, however, several small individual surveys (information collected from different sources) have identified the presence of certain species (as presented above), deeming it important for conservation.

The three areas were also identified in the "Rapid assessment survey of coastal habitats to help prioritize the suitable new areas needing a status of protection for the development of a network of marine and coastal protected areas in Montenegro", which was developed by RAC/SPA within the MedMPA net project in 2014.

The three areas were identified as important for protection by both national and international assessments (mentioned in the previous sections) that have deemed the areas to hold irreplaceable biodiversity, in some cases endemic to the Mediterranean (*Posidonia oceanica*) with particular habitats that are only to be seen in Montenegro. These three sites are also very important from the aspect of still holding certain abundance of species that may have been regularly exploited at other sites and thus should be protected.

Key Biodiversity Areas (KBA) approach

In selecting the pilot sites, the project applies the KBA approach[59] to identify globally important areas for biodiversity conservation. The criteria for identifying KBAs include: (i) presence of threatened species and or encompassing threatened ecosystems; (ii) holding geographically restricted biodiversity; (iii) contributing to ecological integrity; (iv) contributing to biological processes including ecological refugia; (v) and as deemed providing for biodiversity through quantitative analysis. The proposed C/MPAs have been reviewed against the KBA criteria for defining globally significant sites for biodiversity conservation and it was identified that the criteria (ii) "Holding geographically restricted biodiversity" is applicable to the new C/MPAs. Criterion 3: Bio-regionally restricted assemblages is applicable for the proposed C/MPA sites and it refers to the sea grass assemblages of *Posidonia oceanica*. The overall decline in the Mediterranean has been measured as approximately 10% over the last 100 years[60], but recent analysis of area coverage indicates 34% of decline in distribution area or degradation in the last 50 years (Telesca et al. 2015). *Posidonia oceanica* is a very slow growing species and takes a long time to recolonize areas from where it has been removed, although there is some evidence that it has recolonized sites where it has been protected.

The Integrated Biodiversity Assessment Tool (IBAT)[61] has already identified 21 KBAs in Montenegro, out of which 5 are International Bird and Biodiversity Areas, while the remaining 17 are the other KBAs identified through CEPF-supported hotspot profiles (freshwater KBAs are excluded from this assessment)[62]. Figure 5 shows the map of KBAs as produced by IBAT.

KBAs are identified using a set of criteria in the Global Standard for the Identification of Key Biodiversity Areas (IUCN 2016). These criteria relate to threatened taxa and ecosystems, geographically restricted species and ecosystems, ecological integrity, demographic aggregations, ecological refugia, source populations and sites of high irreplaceability. These criteria have been developed building off those used to identify existing networks of subsets of KBAs, including in particular Important Bird and Biodiversity Areas (IBAs), Alliance for Zero Extinction (AZE) sites, and, for some countries, KBAs identified through hotspot ecosystem profiles developed with support from the Critical Ecosystem Partnership Fund (CEPF).

KBAs identified through CEPF hotspot ecosystem profiles have been identified using the criteria of Langhammer et al. (2007) relating to vulnerability (presence of globally threatened species) and irreplaceability (restricted range species, those with large but clumped distributions, globally significant congregations, globally significant source populations and bioregionally restricted assemblages). They have typically been applied using the first of these criteria to terrestrial

[58] Rapid assessment survey of coastal habitats to help prioritize the suitable new areas needing a status of protection for the development of a network of marine and coastal protected areas in Montenegro, RAC/SPA - UNEP/MAP, 2011

[59] IUCN (2016) A Global Standard for the Identification of Key Biodiversity Areas, Version 1.0. First edition. Gland, Switzerland: IUCN.

[60] Pergent et al. 2009

[61] BirdLife International, IUCN and UNEP World Conservation Monitoring Centre, 2016. IBAT Country Profile for Montenegro, Version 2016/1 Available at: http://www.ibat-alliance.org/ibat-conservation

[62] www.cepf.net/Documents/Mediterranean_EP_FINAL_82011.pdf

vertebrates, and in some cases selected plant and invertebrate groups. A small number of other KBAs have been identified through other initiatives using the Langhammer et al. (2007) criteria.

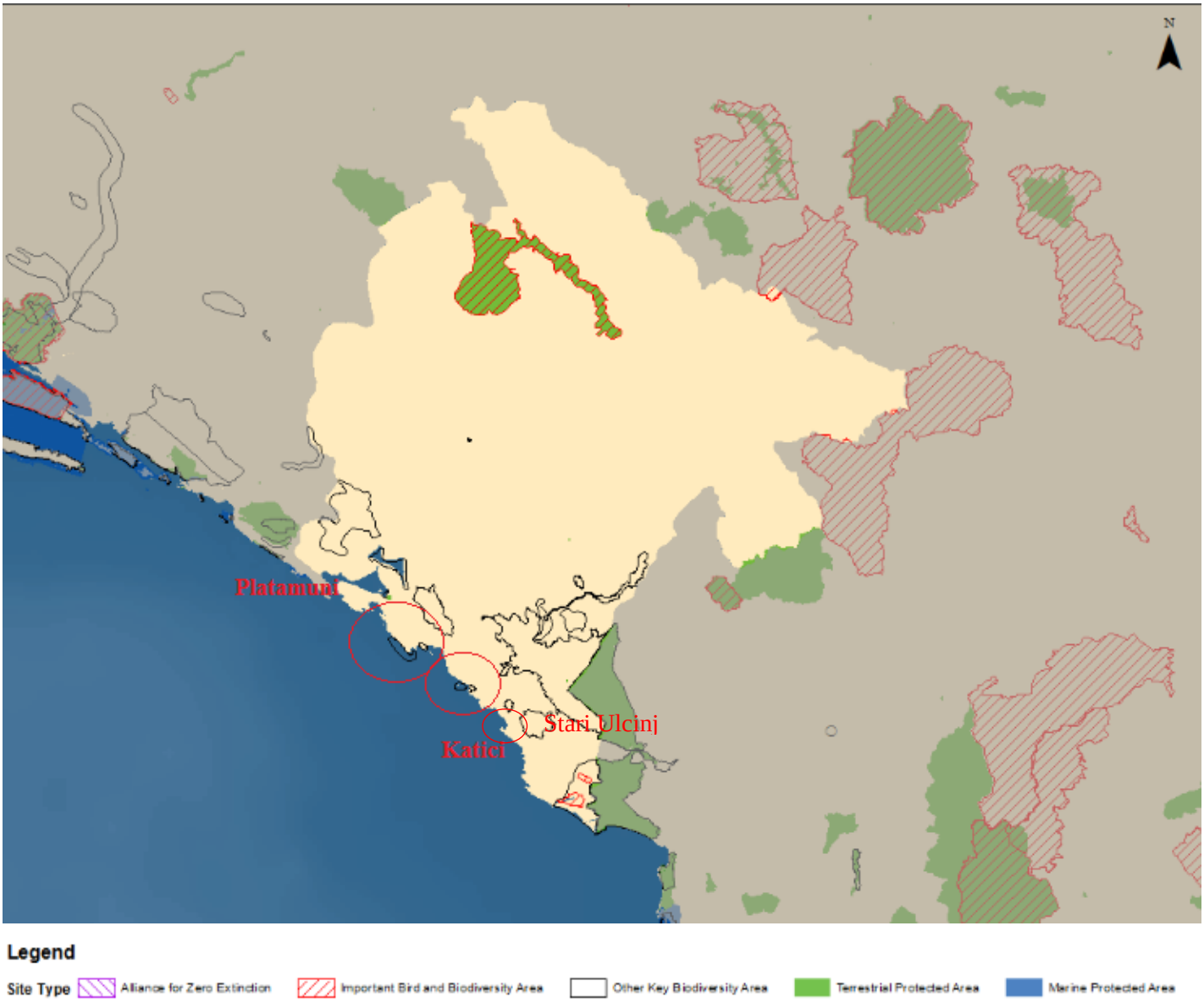


Figure 5. Map of KBAs in Montenegro with focus on Platamuni and Katici (as identified by IBAT[63]), including the location of Stari Ulcinj island

The identification of the KBAs were based on the presence of significant populations of species known only to be found in a particular biome and/or significant regional/sub-regional populations of trigger species, which complements the research done on *Posidonia Oceania* in Montenegro earlier presented. The identified KBA sites include Platamuni and Katici, among others[64], as seen on the map above. Presence of Posidonia assemblages was identified in the area of Stari Ulcinj as well (this site holds the biggest percentage of Posidonia meadows in comparison to two other sites), as presented in the Table 4 below. The area of Stari Ulcinj is the least researched area in the entire marine and coastal belt of Montenegro.

[63] BirdLife International, IUCN and UNEP World Conservation Monitoring Centre, 2016. IBAT Country Profile for Montenegro, Version 2016/1 Available at: http://www.ibat-alliance.org/ibat-conservation

[64] BirdLife International, IUCN and UNEP World Conservation Monitoring Centre, 2016. IBAT Country Profile for Montenegro, Version 2016/1 Available at: http://www.ibat-alliance.org/ibat-conservation

All three identified sites are home to *Posidonia Oceanica* IUCN Red listed species (at thresholds of LC on global level, however, proclaimed as rare and endangered by the Government of Montenegro[65] (National Gazette 55/03)) (please see table below). *Posidonia oceanica* is endemic to the Mediterranean Sea, and is an important habitat-forming species and provides habitat for many species. There have been declines in the population of *Posidonia oceanica* due to mechanical damage from trawling and boat anchoring, coastal development, and eutrophication and other forms of pollution, with losses particularly observed in the western and northern Mediterranean. The overall decline in the Mediterranean has been measured as approximately 10% over the last 100 years (Pergent et al. 2009) but recent analysis of area coverage indicates 34% of decline in distribution area or degradation in the last 50 years (Telesca et al. 2015), however, further information is needed. *Posidonia oceanica* is a very slow growing species and takes a long time to recolonize areas from where it has been removed, although there is some evidence that it has managed to recolonize the sites where it has been protected.

Table 4. Posidonia occupancy in the three proposed C / MPAs

No.	Area	Posidonia occupancy (ha) and coverage of the total area (%)
1.	Platamuni	282 (27%)
2.	Katici	356 (75.3%)
3.	Stari Ulcinj	455 (57.5%)

Within the scope of the Mediterranean Sensitive Habitats Project, spatial priorities for the conservation of seagrass Posidonia oceanica meadows was determined through a systematic planning approach. Marxan conservation planning software was used to identify priority areas across the whole Mediterranean Sea. Based on this study, Montenegrin coastline has been identified as the priority conservation areas with lower opportunity cost for commercial fishing, non-commercial fishing and aquaculture as shown in the following map.[66]

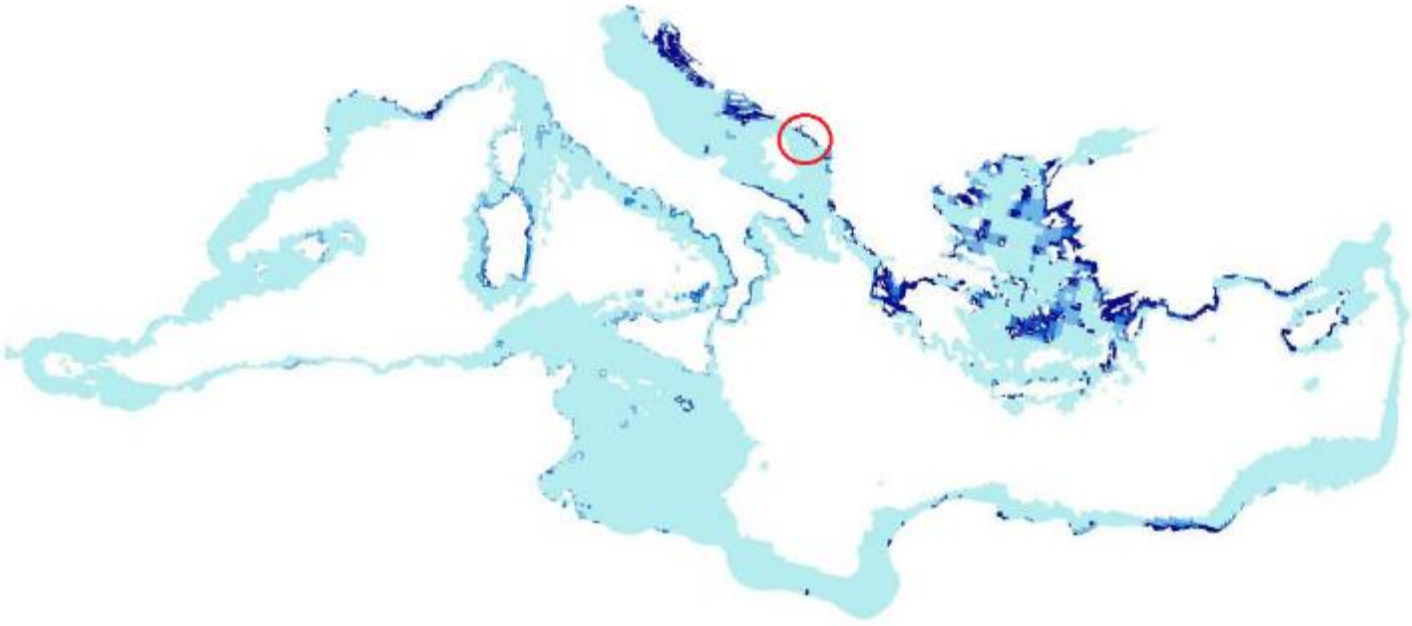


Figure 6. Montenegrin coastline in the Mediterranean with priority areas (Marxan conservation planning software)

[65] In Montenegro, *Posidonia oceanica* is protected by the national legislation as rare or endangered species. The meadows are also protected from trawling by a national fisheries ban (trawling is forbidden above depth of 50 m and in less than two nautical miles from the coast) (National Gazette 55/03).

[66] For more information about the project and the analysis: http://mareaproject.net/download/71/ and Giakoumi S, Sini M, Gerovasileiou V, et al. Ecoregion-Based Conservation Planning in the Mediterranean: Dealing with Large-Scale Heterogeneity. Thrush S, ed. PLoS ONE. 2013;8(10):e76449. doi:10.1371/journal.pone.0076449.

Despite its limited coastal area compared to other Mediterranean countries in its size, all three identified sites host *Posidonia oceanica*. In the case of Montenegro, and in relation to this project, *Posidonia oceanica* could be identified as the geographically restricted biodiversity, but also contributing to ecological integrity. It is an important habitat-forming species and provides habitat for many species. Nursery grounds for the juveniles of many commercially important fishes and vertebrates, such as for several species of the family *Sparidae* (for example, *Diplodus annularis*), *Serranidae* (for example, *Serranus cabrilla*), *Labridae* (for example, *Coris julis* and *Crenilabrus maculatus*) and *Scorpaenidae* (for example, *Scorpaena scrofa* and *Scorpaena porcus*), as well as the sea urchin *Paracentrotus lividus*. *Posidonia oceanica* is also grazed by the green sea turtle (*Chelonia mydas*) and the fish *Sarpa salpa* (Thomas et al. 2005).

The resilience of *Posidonia oceanica* and the meadows it creates seems to be relatively high. It is relatively strong to seawater temperature variations and the invasion by alien species (Pergent et al. 2012), which makes it very relevant in terms of adaptation to climate change. The majority of *P. oceanica* ecosystems sequester carbon in excess of consumption. A significant part of this excess is stored in seagrass sediments (Duarte & Cebrian 1996), where it can remain for millennia (Mateo et al. 2006), and seagrass meadows bury on average 48 to 112 Tg C yr−1 , which renders them hotspots for carbon sequestration (Kennedy et al. 2010).

Posidonia oceanica is protected by EU legislation (Habitat Directive), the Bern and Barcelona Conventions and some national legislation. EU fishing regulations limit trawling activities near the shore (either above 50 m or a certain distance from the coast), which constitute an indirect protection measure for the species (EC Council Regulation No. 1967, 21/12/2006). *Posidonia oceanica* is also protected in various marine PAs in the countries along the Mediterranean Sea (UNEP-MAP-RAC/SPA 2009), however, designation of marine PAs in Montenegro is still lacking. These three sites were identified as the priority marine protected areas in the Special Purpose Spatial Plan for the Coastal Zone of Montenegro (2007). Montenegro is the only country in the entire Mediterranean that still does not have a single marine PA. This is especially relevant considering the fact that the coast of Montenegro is a relevant migratory route for a number of fish species and that the integrity of the Mediterranean ecosystems may be endangered if the most relevant sites in Montenegro are not protected.

Efforts have been made to prevent physical damage caused by trawler-fishing on the meadows by placing artificial reefs along some stretches of the coast, and also by mounting a coastal watch to prevent illegal trawling. At the Mediterranean level, *Posidonia oceanica* is included in the Barcelona Convention Annex II (list of endangered or threatened species). The species is also included in the Annex I (Strictly Protected Flora Species) of the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention).

Due to its rich biodiversity and relevance, Montenegro is part of the Emerald network, which for the Member States is similar to the Natura 2000 network. During 2008, the creation of Emerald network was finished, which was afterwards reviewed and improved by the Council of Europe. The Emerald network proposal of Montenegro consists of 32 areas of special conservation interest (ASCI). A central Emerald database had been developed which today is located in the Institute for Nature Protection, part of Environmental Protection Agency. Meanwhile, Emerald data base has been reviewed (quality control check) by the Council of Europe and updated. Establishment of Natura 2000 network is an EU-funded project that recently started its implementation in Montenegro with the aim of carrying out all necessary activities to start with laying foundations, including extensive field mapping and data gathering, of future Natura 2000 network in Montenegro, in full agreement with the requirements of the EU Birds and Habitats Directives. The results and the know-how from the Emerald project and from the initial establishment of Natura 2000 (WWF, 2009) were used to draft a reference list of Natura 2000 habitats and species. The draft version of the Catalogue of Natura 2000 habitats of Montenegro was prepared and used for the first field inventory training and subsequent mapping of previously identified Natura 2000 habitats.

All three proposed C / MPAs are identified as both Natura 2000 habitats and Emerald sites. Below is the list of values as per Emerald and Natura 2000 designations (as per results of the initial Natura 2000 project (2009) and Emerald project (2008)), as well as the designations of the three sites in relation to their high conservation value (HCV)[67] and global biodiversity hot spots designation by Myers et al. (2000)[68]. Any remaining information that was considered inconclusive

[67] Established by HCV Resource Network

[68] Biodiversity hotspots are 35 biogeographical regions that have both exceptional endemism and extreme threats to their vegetation integrity, and as such are global conservation priorities. They cover 17.3% of the Earth's land surface (excluding Antarctica) and are characterized by both exceptional biodiversity and acute land-cover disturbance (Mittermeier et al., 2004; Myers et al., 2000)

during project preparation shall be collected during the assessment of the biodiversity values in the initial phase of project implementation.

In conclusion, Platamuni, Katici and Stari Ulcinj are already identified by numerous international initiatives as highly valuable for conservation on national, regional and global level.

Table 5. Values of the three proposed C / MPAs by international conventions, sustainable certification schemes and biodiversity hotspots

Designations by International Conventions and Sustainability Certification Schemes and Large Scale Priority Areas	Natura 2000[69]	Emerald[70]	HCV (1-6)[71]	Biodiversity Hotspots (Myers et al., 2000)	Already designated as KBA[72]
Katici	11.34 (11.20) (Posidonia beds)	A2.61 (EUNIS habitat type – seagrass beds on littoral sediments)	HCV1 and HCV3 (Species Diversity and Ecosystem and Habitats)	Within the Mediterranean Basin Hotspot	Yes
Platamuni	32.217 and 92D0 (low formation of Euphorbia close to cliffs and southern riparian galleries and thickets)	A2.61	HCV1 and HCV3	Within the Mediterranean Basin Hotspot	Yes
Stari Ulcinj	11.34 (11.20)	A2.61	HCV1 and HCV3	Within the Mediterranean Basin Hotspot	No

The process of establishing C / MPAs

According to the Law on Nature Protection (2008, 2013), the process begins with a request for development of a Study on Nature Protection. Request should be submitted by the Ministry or the local government, depending on the protection category. The Agency for Environmental Protection in cooperation with the Institute of Marine Biology, in the case of MPAs, is in charge of developing a Study on Nature Protection. PAs can be of international, national or local importance. Their categorization is based on a Study on Nature Protection prepared by the competent administration body - Agency for Environmental Protection. Designation/proclamation of a new PA is finalized by adoption of Act of Establishing PAs (i.e. Act of Designation) in the Parliament of local government or in the Parliament of Montenegro depending on division of jurisdictions over PA categories of protection. Roadmap and timeframe of the process of establishment of PAs (and C / MPAs as well) is presented in the following table.

[69] 11.34 (11.20) stands for Posidonia beds (*Posidonia oceanica*); 32,217 (92D0) stands for low formations of euphorbia close to cliffs

[70] All three sites are listed in Emerald Sites based on endangered natural habitat types. A2.61 stands for Seagrass beds on littoral sediments

[71] For six HCVs please refer to https://www.hcvnetwork.org/about-hcvf/the-six-high-conservation-values. HCV1 stands for concentrations of biological diversity including endemic species, and rare, threatened or endangered species that are significant at global, regional or national levels. HCV3 stands for rare, threatened, or endangered ecosystems, habitats or refugia.

[72] http://www.keybiodiversityareas.org/site/results?cty=272&snm=

Table 6. Roadmap of the activities for establishing PAs, by institutions and timeframe

Activity	Institution	Estimated time frame
Study on Nature Protection	Ministry of Sustainable Development and Tourism Environmental Protection Agency Institute for Marine Biology	15 months
Consultations of stakeholders	Environmental Protection Agency	6 months (parallel with development of the Study)
Act of Designation	Parliament Ministry of Sustainable Development and Tourism Municipality	6 months
Enrolment in register of PAs	Parliament Ministry of Sustainable Development and Tourism Municipality Environmental Protection Agency Real Estate Administration	20 days
Appointment of management structure	Ministry of Sustainable Development and Tourism Municipality	6 months
Management plan	Manager	12 months

Institutional arrangements

There are several state-level institutions that coordinate efforts on environmental protection in Montenegro.

Ministry of Sustainable Development and Tourism

Ministry of Sustainable Development and Tourism is in charge for: setting nature conservation policies, developing regulations, compliance with EU policies and legislation on nature protection, including coordination of the establishment of the Natura 2000 procedures, reporting to the European Commission, involvement of stakeholders, education and communication activities. The Ministry plays a central role in the supervision of the spatial planning and tourism development in Montenegro.
The Ministry performs administrative supervision over the work of several public institutions, including:

- Environmental Protection Agency (EPA)
- National Parks of Montenegro
- Public Enterprise for Coastal Zone Public Management of Montenegro ("Morsko Dobro")

Environmental Protection Agency (EPA)

EPA has numerous competences related to nature protection, such as monitoring of the state of habitats and species, development of Nature Protection Studies in the process of establishment of PAs, preparation and realization of monitoring programs, preparation and maintenance of the database on the environment (including biodiversity); review and issuance of consents for strategic environmental assessment (SEA) and the EIA (Environmental Impact Assessment) studies; approvals for the collection, use, breeding, keeping and trafficking of wild animal species; approvals for the picking, collection, use, cultivation, keeping and movement of protected wild herbs and fungi; approvals for scientific and educational research on protected natural resources as well as for speleological activities; defining measures of protection of strictly protected and protected species of plants, animals and fungi, and measures to protect their habitats; issuance of consents for nature appropriate assessment, assessment of imperative reasons of overriding public interest, and compensatory measures; education activities; and providing free access to information regarding nature protection.

Internal organizational units of the EPA include:

- Sector for nature protection, monitoring, analysis and reporting;
- Sector for the issuance of permits;

- Sector for communication and information system management;
- Aarhus centre;
- Department of legal and financial affairs;
- Department of chemicals;
- Department or ionizing radiation.

- National Parks of Montenegro

Based on the provisions of nature protection and national parks legislation, Public Enterprise National Parks of Montenegro is responsible for preparation and implementation of periodic plans and programmes for protection, promotion and the use of National Parks. Management plans are adopted every 4 years and annual programs are developed in line with the management plans. These plans and programmes are approved by the Government.

- Public Enterprise for Coastal Zone Public Management of Montenegro (PE-CZPM)

This institution has the key role in managing the maritime public domain for general and special public purposes according to the provisions of the National Law on Maritime Domain. The most important activities of the PE-CZPM are: management of PAs covering the public maritime domain, renting-leasing of beaches and locations for temporary tourist and service facilities during the summer season, construction and maintenance of coastal infrastructures such as walls, harbours, docks and other public areas, management of local ports, monitoring bathing water quality at beaches, international cooperation and participation in international projects, promotion of environmental protection, participation and cooperation with local municipalities and national agencies in management of PA and other environmental issues. PE-CZPM has 26 employees.

PE-CZPM includes the following sectors:

- Service for general and legal affairs
- Economic and financial service
- Department of planning and building (permits and licenses) in the Public Maritime Domain
- Department of Sustainable Development
- Department for inspection (monitoring small harbours and marine environment)
- Department for building and maintenance in the coastal zone

PE-CZPM does not have inspection/ enforcement functions (but is relying on the relevant national inspectorates). General supervisory and inspection tasks related to environmental protection are shared between national and local institutions.

Ministry of Agriculture and Rural Development

This Ministry is responsible for setting policies, developing regulations, maintenance of compliance with EU policies and legislation on forest management and protection, fishery, hunting, agrobiodiversity, Cartagena protocol, bio-safety, GMOs, pesticides regulations and water management and protection regulations. The Ministry performs administrative supervision over the work of several public institutions, including: Water Directorate, Forest Administration, Veterinary Administration, etc.

Ministry of Transport and Maritime Affairs Administration for Inspection Supervision

The Ministry is responsible for maritime traffic, security protection of merchant ships and ports open to international traffic, prevention and taking emergency measures in case of sea pollution from vessels, transport of dangerous goods via sea in accordance with the specific law, maritime economy, safety of maritime navigation, monitoring, and study of economic conditions and economic position of entities in these areas. The Ministry performs administrative supervision over the work of Port Authority and Maritime Safety Department of Montenegro. Port Authority is in charge for maintenance, managing, protection and promotion of ports, port development plans, providing for conditions set by international and national regulations by which prevention of pollution from ships is regulated and similar.

Local Governments

Local governments have an important role in the management of PAs (and thus C / MPAs). Jurisdiction[73] of local governments regarding integrated coastal zone management is achieved through the work of the various municipal bodies, including secretariats for development (and in some municipalities, development agencies), secretariats for planning, urbanism and construction, secretariats for public utilities (water supply, waste, sewage, etc.), and many other. Six municipalities in the coastal area (Ulcinj, Bar, Budva, Tivat, Kotor and Herceg Novi) have a sector for environment or staff (one or more persons) responsible for environmental issues. At the local level there is also communal inspection. For the three priority C / MPAs as identified in the previous section, the following local governments – municipalities include Ulcinj, Bar, Budva and Kotor.

The 2008 Nature Protection Law delegates competences for proclamation and management of certain categories (lower categories of protection than national parks and nature reserves) of nature PAs to local government level. Local administrations are thus responsible for proclamation and management of regional/nature parks, natural monuments, and landscapes with outstanding characteristics. Similar provisions were already in place under previous legislation, although the actual performance of municipalities in relation to these competences remained limited because of the lack of financial resources, technical and human capacities.

Local governments are also in charge for:

- Implementation of Biodiversity Strategy through development of Local Action Plans for Biodiversity;
- Spatial and urban development planning;
- Development of pertinent Location studies;
- Financial and budgetary provisions;
- Proclamation of PAs of Category III and appointment of Managers of PAs;
- Providing for management of PAs declared at local level including regional parks, parks of nature, and monuments of nature.

Institutional capacities and expenditures for PAs on all levels of government

The table below gives detailed information about the total number of personnel involved in the domain of nature protection. Except for the Public Enterprise for Coastal Zone Public Management, none of the institutions have staff dedicated entirely only to coastal PAs.

Table 7. Institutional capacities

Name of the institution	Number of employees/positions in nature protection (experts)
Ministry of Sustainable development and Tourism	2
Environmental Protection Agency	17
Public Enterprise for National Parks	191 (of which 33 park rangers/field staff, 28 mid-level managers/ professional staff/ head rangers 13, 8 senior managers/ directors/ deputy directors, 72 support staff, administrative staff 35 and 30 expert staff)
Ministry of Agriculture and Rural Development	10
Public Enterprise for Coastal Zone Public Management	3
Inspection Administration	7 ecological inspectors 4 fishery inspectors
Local governments	34

Each of the afore mentioned institutions responsible for managing issues related to PAs also have a designated budget for tackling PAs, which is included in the overall spending. The total amounts are given in the table below. The institutions

[73] According to the Law (Nature Protection Law), local governments have full jurisdiction in the process of establishing and management of PA categories: Nature Parks, Natural Monuments and Areas of Exceptional Values - Protected landscapes.

do not take record of the amounts spent specifically on management of PAs, except in the case of Public Enterprise for National Parks, which is dealing only with national parks and the Public Enterprise for Coastal Zone Public Management, which is entirely focusing on the coastal areas. One coastal PA manager (Tivat Salina) is included in the expenses of the Public Enterprise for Coastal Zone Public Management.

Table 8. Expenditures for PAs in public institutions

Institution	Structure of the expenditures (USD)	Planned expenditures in the Budget (USD)
Ministry of Sustainable development and Tourism (2016)	Salaries: 461,989.38, other earnings: 10,318.47, material costs: 8,622,08, services: 591,299.36, subventions: 652,016.98, other expenditures: 39,405.52	1,763,651.8
Environmental Protection Agency (2016)	Salaries: 897,280.07, other earnings: 110,828.02, material costs: 44,516.98, services: 355,205.94, maintenance; 1,910.83, rents: 817,41, other expenditures: 44,108.28	1,465,276
Public Enterprise for National Parks (available data is only for 2015)	For Salt works Ulcinj: 116.000, for NP Skadar Lake: 955,414.01	2,381,618.8
Public Enterprise for Coastal Zone Public Management (2016)	Salaries: 467,091.29, program activities: 74,309.98, capital investments: 201,698.51, other expenditures: 254,777.07	997,876.85
Total:		**6,608,423.4**

Importance of C / MPAs protection in national policies

The important natural potential and recognition of the responsibility to preserve nature has been a source and a driving force of the adoption of the Declaration on Montenegro as an Ecological State. In 1991 Declaration the Parliament of the Republic of Montenegro defined strategic commitments that future development of Montenegro would be in accordance with the principles and requirements of sustainability. Such commitment was confirmed further through subsequent regulation, starting with the Law on Nature Protection (2008, 2013).

Biodiversity conservation has been identified as a priority in numerous strategic documents such as the National Strategy for Sustainable Development, Environmental Performance Reviews, National Biodiversity Strategy and Action Plan and others. Specifically, many of the strategic documents are referring to conservation of coastal and marine biodiversity and ecosystems as the top priority in the environmental sector. According to the requirements of the Strategic Plan 2020 and global Aichi Targets of CBD (Montenegro is a Party of CBD since 2009), 10% of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, should be conserved through effectively and equitably managed, ecologically representative and well connected systems of PAs and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes. On the national level, this goal was first set by the National Strategy for Sustainable Development (2007) and reiterated by the National Biodiversity Strategy and Action Plan (2010, 2016), as well as in MDGs implementation in Montenegro. However, there are no specific laws or policies dealing solely with C/M PAs in Montenegro. Instead, the main laws and strategic documents that apply for PAs in general also apply for C / M PAs.

Protection of marine and coastal ecosystems is generally regulated by the Law on Nature Protection in following aspects: protection of the sea and seabed, definition of protected natural areas, categorization of protected natural areas, establishing protection zones in the protected nature areas, establishing the list of strictly protected and protected wild species of plants, animals and fungi, etc. (articles 21, 37, 49, 54). Other provisions for PAs in this Law are also relevant for coastal ecosystems, including designation/establishing of PAs (C / M PAs) and setting up their management. Certain relevance for protection of marine and coastal ecosystems is also contained in the Law on Marine Fisheries and Aquaculture (2003, 2011), Law on Public Maritime Domain (1992, proposal of the new Law is in the process of adoption), Law on Spatial Planning and Construction of Facilities (2013), Law on Environment (2008), Law on Sea (2007), EIA and

SEA laws, etc. As an internal part of national legislation, multilateral environmental agreements also have great importance for protection of marine and coastal ecosystems and PAs. Status of ratification and implementation of multilateral environmental agreements relevant for marine and coastal ecosystems and PAs is presented in the table below.

The concept of the Integrated Coastal Zone Management (ICZM) is embedded in a number of policies and strategic documents in Montenegro. The country has adopted its National Strategy on integrated coastal zone management (NS ICZM) in 2015, following obligations arising from ratification of the Barcelona Convention and its ICZM and other protocols (in 2007/2011).

Table 9. List of ratified multilateral environmental agreements

International Agreements	Date of succession, ratification or accession	Competent authority for implementation
UN Convention on Biological Diversity (CBD)	3 June 2006	MSDT[74]
UN CBD Cartagena Protocol on Biosafety	23 October 2006	MSDT
Convention on conservation of wetlands of international importance especially as waterfowl habitat (Ramsar Convention)	3. June 2006	MSDT
UN Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES– Washington Convention)	March 2007	MSDT
UNESCO Convention on Protection of the World Natural and Cultural Heritage (World Heritage Convention)	3 June 2006	National Commission for UNESCO
Revised Convention on the protection of the Mediterranean Sea against pollution (Barcelona Convention) and its Special Protected Area Protocol	Ratified in 2007 as well as the four accompanying Protocols.	MSDT
Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)	1 March 2009	MSDT
Convention on Migratory Species (UNEP/CMS) (Bonn Convention)	1 March 2009	MSDT
Agreement on the Conservation of Cetaceans in the Black Sea Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS)	1 March 2009	MSDT
European Landscape Convention (CoE, Florence 2000)	November 2008	MSDT
United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa – UNCCD	March 2007	MSDT
African-Eurasian Waterbird Agreement (AEWA)	January 2011	MSDT

[74] Ministry of Sustainable Development and Tourism of Montenegro

International Agreements	Date of succession, ratification or accession	Competent authority for implementation
Agreement on the Conservation of Populations of European Bats (EUROBATS)	2010	MSDT

Main milestones related to PA management, institutional and legislative framework since 1991 are presented in the table below.

Table 10. The main milestones related to the institutional and legislative framework for PAs management

Milestones	
1991	Declaration of Montenegro as an Ecological State
2007	Adoption of Constitution containing provision on Montenegro being (*inter alia*) an 'ecological state'
2007	National Strategy for Sustainable Development of Montenegro
2007	Special Purpose Spatial Plan for the Public Maritime Domain
2008	Establishment of the Environment Protection agency
2008 to date	Formal application for EU membership and start of the process of harmonization of legislation and institutional framework with the *Community acquis*
2007 to date	Ratification of main environmental Conventions and related Protocols
2010 and 2016	National Biodiversity Strategy with Action Plan
2013	Law on Nature Protection being amended

The existing institutional framework that is responsible for the preservation of biodiversity and sustainable use of natural resources in Montenegro is mainly centralized within the governmental institutions which are located in Podgorica. Even though decentralization is promoted when it comes to decision making, there are not many examples in practice, while the non-governmental and business sector and general public are poorly involved (NBSAP 2010).

II.1.1) THE GLOBAL ENVIRONMENTAL PROBLEMS, ROOT CAUSES AND BARRIERS THAT NEED TO BE ADDRESSED

1.1. Global environmental problems

While comprehensive data on population and distributional changes are lacking for most species and habitats[75], there are many examples of threatened and declining biodiversity in Montenegro reported in professional literature and official documents. The flora and fauna of the coastal zone are considered as the most threatened. Vulnerability Assessments of the coastal area of Montenegro that were developed under CAMP[76] project indicated a high level of vulnerability in marine part of Boka Kotorska, but also at some locations in Budva, Petrovac, Sutomore, Bar, and Ulcinj. Biodiversity in Platamuni, Katici and Stari Ulcinj is threatened mainly by: (i) habitat loss and fragmentation; (ii) overexploitation of wildlife, and (iii) the effects of global climate change.

Habitat loss and fragmentation

In the coastal area of Montenegro, intense anthropogenic influence has been identified leading to reduction in the area under natural vegetation, fragmentation of habitat, changes in botanical composition of habitat due to nitrification and penetration of invasive species. According to the IUCN categorization vulnerability factors, the following aspects of anthropogenic impacts on habitats can be distinguished:

[75] The result of insufficient research and lack of a more complex system of monitoring of biodiversity.
[76] http://www.pap-thecoastcentre.org/about.php?blob_id=74&lang=en

1. Loss of habitat: 1.1 Agriculture - 1.1.5 Grazing and 1.1.9 Other, 1.2 Exploitation, 1.3 Urbanisation - 1.3.2 Human settlements and 1.3.3 Tourism, 1.4 Non-specific causes - 1.4.2 Deforestation;

3. Indirect impacts: 3.1 Anthropogenic indirect impacts - 3.1.1 Recreation / Tourism;

4. Atmospheric pollution: 4.3 Fires;

6. Pollution of land and water.

The greatest threat to habitats is the development of tourism and urbanization that accompanies it. By placing the beach equipment and the construction of related facilities on the beaches vulnerable habitats are being degraded. The monitoring of this type of habitats during the last 10 years a trend in coastal area of Montenegro shows decrease in surface and representativeness of this habitat on many localities[77], however, there is no exact data for Katici, Platamuni and Stari Ulcinj. As an inevitable consequence of intense anthropogenization, adventive species were identified, many of which are recognized as invasive, including *Oenothera sp.* (very numerous), *Xanthium italicum, Conyza albida, Amorpha, fruticosa, Robinia pseudoacacia, Paspalum paspalodes, Eleusine indica, Datura stramonium*.[78] Urbanization related to tourism is a major anthropogenic negative factor on Platamuni. Vegetation on the sea cliffs is protected because of its inaccessibility, but planting species that are potentially invasive in the urban part of the beach is dangerous for this type of habitat. Another important habitat that is being threatened is the habitat of *Posidonia oceanica*. The occurrence and importance of this species as a habitat is already elaborated in the previous chapter. Habitat loss and fragmentation have negative impacts on wildlife, especially those that depend on fragile ecosystems.

There is a preliminary list of several threatened species within the three priority sea/landscapes that may be affected by the habitat loss and fragmentation, including:

- In the area of Platamuni some threatened species include:

Invertebrates: *Palinurus elephas (VU)*

Fish: *Epinephelus marginatus (EN), Cetorhinus maximus (VU), Carcharodon carcharias (VU), Mobula mobular (EN)*

- In the area of Katici:

Fish: *Cetorhinus maximus (VU), Carcharodon carcharias (VU)*

- For Stari Ulcinj some threatened species that are estimated, but not confirmed, include:

Fish : *Epinephelus marginatus (EN), Cetorhinus maximus (VU), Carcharodon carcharias (VU), Mobula mobular (EN)*[79]

As previously elaborated, the entire coast, including Platamuni, Katici and Stari Ulcinj is affected by tourism exploitation leading to land and water pollution.

Overexploitation of wildlife, fisheries

Bird fauna at Velika Plaza and Ulcinj is endangered by hunting. There is no reliable data on the amount of hunting and extraction of specimens because few complaints are submitted to authorities, and there is not a formal monitoring and enforcement against hunting.

At the area of Platamuni (from Platamuni Cape to Zukovac Cape) with Seka Albaneze, but also at the area of Mendra Cape (Valdanos) - Stari Ulcinj Island extensive and uncontrolled fishing is regularly taking place.

Localities with high complexity, like several sites at Platamuni and Katici localities show high fish abundances. This homogeneity could be explained by the fact that Montenegrin coast is under important impact of overfishing and harmful fishing practices (dynamite fishing and date mussel extraction). It is also remarkable the low abundance and low size of species with high commercial value (*Epinephelus spp., Diplodus spp., Sparus aurata, Dentex dentex*). However, if we pay attention to richness data (12.7 species/250 m^2) we observe that this richness is similar to others reached in comparable

[77] Petrovic Cakovic, Danka, 2013. Habitats of selected sites and evaluation of their vulnerability in the analysis of vulnerability in the narrow coastal area

[78] Petrovic Cakovic, Danka, 2013. Habitats of selected sites and evaluation of their vulnerability in the analysis of vulnerability in the narrow coastal area

[79] Not confirmed, the presence of the species is estimated based on their occurrence in surrounding areas

studies along the Mediterranean. This shows that species appear, but its frequency and abundance is clearly under its capacity.

Climate change

In the last two decades, the annual precipitation oscillates around normal values and generally does not exhibit a tendency to increase or decrease. Exceptions are the north-eastern parts of Montenegro (Bijelo Polje) and the Coastal Area, where there is a trend of slight reduction in rainfall (however, correlation is small, i.e. 0.3) (2nd National Communication to UNFCCC, 2014).

In line with the expected climate change (increase in temperature and decrease in humidity) it is expected there will be a reduction and loss of species sensitive to significant fluctuations in temperature and humidity environment (amphibians). Loss of species dependant on freshwater and air- and soil- humidity is expected. Firstly, amphibians and reptiles that live in or near to watercourses in the karstic area will experience more drastic living conditions changes involving less or no water. Loss of water and humidity will affect the whole country but the karstic area will suffer first and the most drastic changes. Both surface and (under)ground waters will withdraw deeper into karstic ground that will cause loss of some drinking water sources. Upon period with no or less ground waters, extreme rainfalls will come with destructive torrents. Consequently, there will be significant loss of reptiles and amphibians in wider Starocrnogorska karstic area accompanied with karstic terrains in Kuci – Zijovo (2nd National Communication to UNFCCC, 2014).

Increasing eutrophication in the basin of the Bay of Kotor and the presence of algae *Caulerpa racemosa* in the waters of the Adriatic Sea is a well-known fact, but there is so far no data on clear connection with global warming. In line with the increase in sea temperatures, it is expected there will be an introduction of new thermophilic (invasive) species from southern marine biogeographic zone. Additionally, one of the main problems may be the migration of marine species through the Suez Canal mainly from the Red Sea and the Indo Pacific area in the Mediterranean. It is the so-called Lessepsian migration path. It is also expected a significant number of invasive species to be introduced in the ballast waters. In addition to structural changes in the composition of the phytoplankton community, there will be a new competitive relationship between stenosis and euri-valence organisms. Even though not registered yet, coral bleaching could be expected as well (2nd National Communication to UNFCCC, 2014).

Because of sea level rise (18 – 22cm by 2050), the following changes in coastal habitats are expected: (i) due to general abrasion and inundations of the land, loss of low parts of sandy beaches, coastal lagoons and lowlands will be primarily effected; (ii) intrusion of the salt water in the soil and ground waters near / next to the will affect shallow water table and drinking underground waters and areas suitable for construction of tourist resorts, (iii) conversion of brackish and freshwater areas into permanent marine, salted waters. Concerning the halophyte vegetation at sand dunes, it is expected to be inundated while the entire vegetation belts are expected to be shrinking (2nd National Communication to UNFCCC, 2014).

Threats

The National State on Environment Reports which are prepared and updated by the Environmental Protection Agency and annually adopted by the Government indicate that water ecosystems and forests, then also urban and agricultural areas are under the greatest negative impacts. Different ecosystems are endangered to different extents depending on the intensity of anthropogenic factors. In this regard, coastal ecosystems are endangered where the natural coastal habitats have been occupied by tourism facilities and urban development. Aquatic ecosystems are under pressure from various forms of pollution, which decreases their productivity.

Montenegrin marine resources are exposed to numerous and diverse pressures which primarily include impacts from tourism and impacts of pollution from untreated communal waste water, solid waste, from ship building/repairing, from ports and marinas, as well as from vessels and industry.

Unsustainable tourism, fishing and urbanization on the coastline: Fishing, and to a much greater extent, tourism, are the two main human activities along the coast. No other sizeable industries are present. Pollution from untreated sewage follows the development of tourist infrastructure and the general increase in human pressure along the coast. The dumping of solid waste or soil from the road and other constructions will be a serious problem if the negative effects on marine life are underestimated. Threats are due to the rapid expansion of tourism and the future plans for tourism infrastructure (the sale of land seems to be very active and still in progress). No sewage treatment seems to take place at present but some are planned. New infrastructure (hotels, marinas, roads, etc.) are likely to increase dramatically. Beach-based and nautical

tourism seem to be the target activities at present and all development appears to be in that direction. The threat from diving is not generally crucial at this stage as diver numbers are low. Nearly most, if not all, of the beaches and creeks are occupied by tourist activities, while cliffs and rocky coasts are mostly still intact. However, in the areas near Petrovac – zone and Katici towards Dubovica disturbance is being mainly caused by intensive diving and tourism development. Percentage of constructed land in coastal area in 2011 was 15.5%[80].

Another significant threat, especially in the areas of Platamuni, Katici and Stari Ulcinj is fishing. Four main fisheries are located along the coast (Bar, Petrovac, Buda and Herceg Novi). Small-scale fishing is practised by many individuals all along the coast. The main gears include nets, trammel-nets, pots/traps and long-lines. There are few trawlers of small and medium size as well, but no exact data is available. Most of the areas around the coast are still suitable for exploitation and characterized by high species diversity. However, it was observed that throwing dynamite, illegal fishing and night fishing with bottles and underwater lights are chronic problem in all locations of the open sea. Furthermore, the impact of these negative effects are felt in the last five years in terms of the reduction of the catch and the number of species, because most fishermen believed that the catches were reduced for 40-60% in the last five years depending on the location. Comparative value of CPUE (catch per unit of effort) for the period of 2004-2005 shows 156.44 kg per haul and in the period of 2006-2007 it was 141.92 kg per haul, which shows changes in abundance. Also, solving the problem of waste water that is flowing directly into the sea without any treatment must also be a priority in order to preserve existing resources in these areas[81].

Land-based pollution: Relatively narrow belt of coastal waters and at the open sea are also very vulnerable to the pollution from wastewater discharges. Total level of marine pollution shows a high degree of vulnerability of the Boka Kotorska Bay and the Bay of Tivat, ports in Budva and Bar, and stretches from Ulcinj to Port Milena, but the pollution exists all along the coast and is mainly associated with tourism development. Water and sediment pollution is particularly pronounced in the immediate vicinity of Bijela shipyard and within a short reach from the site of former ship overhaul Arsenal where high concentrations of heavy metals and organic pollutants have been registered. The level of pollution at the open sea is lower due to relatively big depth and good exchange and mixing of waters.

Communal wastewater is one of the main sources of sea pollution in the entire coastal zone. Efforts to improve wastewater collection, treatment and discharge system are ongoing, whereas a significant improvement has been achieved due to enhancement of sewage network (connections to main collectors and expansions). The problem with sewage is exceptionally emphasized during the summer season when the population in coastal area increases significantly due to arrival of tourists (1.4 million of tourists and 9 million of overnights in 2015). A treatment plant with the capacity of 110,000 PE (with two small plants in Jaz settlement) has been constructed in Budva. Other five municipalities do not have wastewater treatment plants, but activities to develop project documentation for their construction are under way[82].

1.2. Root causes

Main drivers and causes of ecosystem degradation in the coastal and marine area of the country are as follows:

a. Deficiencies in the PA system. (i) Existing PA coverage does not provide sufficient protection for all nationally and globally important ecosystems and their critical components. The Spatial Plan of Montenegro (2008) and the Special Purpose Spatial Plan for the Coastal Zone of Montenegro (2008) each contain proposals for placing under protection new PAs that should integrate ecological values of both coastal (terrestrial) and marine ecosystems. These have been also identified through research projects implemented so far (see chapter 2.2.). However, the status of protection of existing coastal PAs (in total more than 25, covering the area of 13,012.19 hectares along the coast) is not fully compatible with the situation on the ground (the boundaries are not strict, certain parts of the PAs have lost some biological values, etc.) and the trend in proclaiming new C / MPAs has been low. This is mainly due to lack of information and official data on the biological values in the area. (ii) There are no MPAs established so far. Even though several previously implemented projects have identified potential MPA sites (see chapter 2.2), Montenegro is the only country in the entire Mediterranean that does not have a single MPA. (iii) Management of existing coastal PAs is not operational and transfer of the rights and authorizations over these PAs is not provided as defined in the legislation. According to the Law on Nature Protection (2008, 2013), management

[80] CAMP and Draft Physical Plan of Special Purposes for Coastal Area, 2007

[81] Fishery activities assessment in Montenegro: Case study of five selected parts of Montenegrin coast, RAC/SPA - UNEP/MAP, 2013

[82] National strategy for integrated coastal zone management for Montenegro, 2015

of PAs in the Coastal Area - Public Maritime Domain is given to the Public Enterprise for Public Maritime Domain. However, this obligation is not practically applied due to a number of limitations, including incomplete information about exact PA boundaries, category and status of protection of the existing PAs, incompatibility of earlier procedures for their designation, etc. Basically, the existing model of PA management is currently not sufficiently developed to adequately preserve important biological values of PAs. Particular concern is raised due to the fact that the existing PA system is not established in a way to include and thus protect all valuable biodiversity assets (which is also a reason why no MPAs are established so far), it does not have an adequate (or none whatsoever) monitoring system, management staff is practically non-existent and the mechanisms for setting up new staff is not adequately operating, nor there are any financial mechanisms in place. The PA management system that is being applied requires updating and adjustments to respond to the needs of the local people and the biodiversity that is to be preserved.

b. Protection of environment as a low political priority. Although environmental protection and conservation of biodiversity and natural resources are formally declared as priority in numerous official documents (Declaration of the Ecological State, Spatial Plan of Montenegro, National Strategy for Sustainable Development, etc.), in practice they are positioned low in the political agenda, since the economic sectors (tourism, energy, agriculture, etc.) consider creating profit as the main priority. The interests behind the "development without barriers" are generally justified with strong financial and investment arguments that rank higher than the arguments for environmental protection, e.g. potential legal procedures and administrative measures for biodiversity protection could be considered as impediments to the economic development of the country. Even more so, sectoral promotion of policies is not compatible with sustainable use of natural resources and protection of biodiversity. Ecosystem approach is not being properly applied in the development planning for coastal area even though it is prescribed by legislation and to some extent integrated in national and local policies and plans. These include the sectoral policies which do not focus on environmental sustainability in the field of action of certain sector, e.g. the leading policies in the tourism sector is not yet entirely focused on more environmentally sustainable form of tourism that result in smaller number of guests and less pressure to the environment.

c. Demographic, social and economic changes which influence biodiversity. Internal migrations of the population (from rural communities to the cities and from the north of the country to the capital and to the coastal area) have changed the demographic profile of rural settlements in the coastal area. There are significant changes in the age structure of the population, which further affects the labour capacities and economic potentials of Montenegro. These changes affected traditional forms of the utilization of natural resources as well as traditional life style, especially in regards to fishing. Unfavourable economic conditions caused increase of the volume of direct exploitation of biological resources. Volume of direct exploitation of biological resources is depending on their accessibility, while unequal distribution of the benefits arisen from their exploitation is causing local population feel dissatisfied. While the traditional fishers, for example, behave on certain codes when it comes to fishing, the newcomers use any given tool and opportunity to catch fish, even explosives, which kill more fish, but also negatively affect the surroundings, sea beds, distribution of fish population and then subsequently other species. Drastic seasonal changes in population (1.4 million of tourists and 9 million of overnights in 2015 during summer) in coastal areas put increased pressure on biodiversity and existing natural resources.

d. Poor participation of stakeholders. Historically, there is no continuity in organizing participation of key stakeholders in decisions making process regarding the use and management of natural resources. Existing mechanisms for the management of PAs do not meet the needs of local population linked to the use of natural resources. On the other hand, general public declaratively claims environmental protection/biodiversity conservation is always the obligation of "someone else who is in charge for taking action" and unwillingly accepts participation in the actions undertaken by organized forms of civil society. According to the Law on Nature Protection (2008, 2013), designing and implementation of each activity having a potential effect on nature requires public participation, however, the outcome is usually a quite passive response from a narrow group of stakeholders. No other incentives for public participation has been assigned and pursued by law. Further on, the establishment of PAs in general, including C / MPAs is perceived as a detriment to the local population, while restricting their activities and decreasing their benefits from the natural resources. This is mainly due to poor awareness of local population on the benefits of the PAs. Some may also consider tourism development beneficial for local population as it brings financial resources very much needed in the rural areas.

Combined with insufficient capacities of responsible institutions, these deficiencies lead to public administration not responding to the pressures from high real estate demand (particularly in the most attractive locations) in a way that is ensuring biodiversity conservation in the designated areas, e.g. pressures from intensive urbanisation and construction not adapted to the natural values, particularly in the coastal area.

1.3. Barriers

Past projects have managed to set up a baseline for identification and establishment of C / MPAs, with conducting baseline assessments of several selected locations and few recommendations for management models. However, those projects could not manage to 1) undertake a comprehensive assessment of the ecosystem values in the entire coastal area of Montenegro using relevant international standards in order to support reclassification of existing coastal PAs and establishment of new C / MPAs, 2) the recommendations for new and improved management models were not integrated in the national legal and regulative framework nor have been developed with a view of comprehensively addressing all coastal PAs, but have been tackled on individual basis and sometimes not complementary to other similar projects, and 3) none of the projects have managed to go forward with establishing any C / MPAs, further than developing feasibility studies (which is due to many factors as explained above). However, certain important key lessons were identified from the outcomes of the previously implemented projects, which helped to point out the major existing barriers through consultations with relevant national stakeholders during the project preparation phase.

The long-term solution sought by this project is to improve the conservation mechanisms and enhance the sustainable use of coastal and marine biodiversity through more effective management of the C / MPAs sub-system. However, the following barriers were identified as impeding this objective and which will be tackled during project implementation to ensure successful results:

a. Lack of available detailed data on biodiversity and the status of the coastal and marine ecosystems. The projects implemented so far have been assessing the ecosystem conditions only in a localized manner and there has been no coordination between them. The standards and regulations used for assessment were usually not unified. There is also no comprehensive data base that could be used for information storing and sharing on the national level. (i) Survey campaigns on marine biodiversity provided so far are not sufficient to complete inventory even for coastal waters. No deep sea diving survey has been completed to date. (ii) Scientific research is rare as it requires considerable technical and financial resources, and its results are even more rarely used in decision-making as they are kept private for the solely use of the researchers. Moreover, the scope of the research in the context of monitoring of coastal and marine environments and coastal processes are insufficient. This weaknesses result in a lack of systematically gathered and comparable time series of data sets on biodiversity and important environment quality parameters, thus impeding with both management of existing coastal PAs and establishment of new C / MPAs. Upon until date, 4,079 species have been recorded in Montenegro, amounting to around 70% of the total number of species recorded in the Mediterranean. However, this is not likely to be a full list, as some species have been recorded only once and their status in Montenegrin waters is unknown (e.g. whether they are migratory or resident), and not all of the marine territory of Montenegro has been explored (the eastern Adriatic is the deepest part of the sea and largely unexplored, so records on new species are expected), including the areas proposed for protection, i.e. Platamuni, Katici and especially Stari Ulcinj.

   The monitoring of biodiversity in Montenegro since 2000 has been carried out in a very limited manner within the framework of the National Environmental Monitoring Program. Due to the constricted financing for this Program, data gathered so far does not offer the possibility for complex analyses of trends in the condition of indicator species populations, or changes in selected habitats and the overall living environment. The threats to biodiversity are not analyzed in details in order to be able to suggest effective measures for biodiversity conservation. The existing Biodiversity Monitoring Program is limited and does not support the operation of the network of PAs and forthcoming National Ecological Network for Natura 2000 sites that is currently being initiated. It is not being implemented in a way to provide all relevant and needed information as required with national legislation, but also the UN CBD, Bern and Bonn Convention, Barcelona Convention and its SPA Protocol. EcAp approach was developed by UNEP/MAP project and planned to be implemented through the national monitoring program, but there has been a huge lack of data, but also human and technical capacities. This is thus a crucial barrier for informed decision-making in biodiversity protection policy. Lack of systematized data and comprehensive studies on biodiversity create limitation on replication and scaling up of the project results and the sustainability of its

actions. Additionally, lacking a valid baseline puts a limit on measuring the progress and the effectiveness of implemented projects.

b. Limited institutional capacity (personnel, training, equipment, etc.) and financial resources. In the circumstances with insufficient financial allocations from state budget and with no financial participation of private sector, efficiency of biodiversity conservation activities (monitoring, scientific inventories and database, management plans for PAs, etc.) is very low. Apart from the limited capacity of the relevant government institutions responsible for coordination and management of coastal PAs (see section on Institutional arrangements for more details), very small number of education and research institutions is providing specialized training relevant for implementation of biodiversity protection/conservation measures or management practices regarding coastal PAs and ecosystem services. For that matter, there is none providing training and thus enforcing the capacities of the relevant institutions for management of C / MPAs. Despite Montenegro's strong commitment to sustainable development in the coastal area, capacity and awareness on the importance of integrated coastal area management are lacking.

   Furthermore, due to lack of mainstreaming of the issues of biodiversity values in the work of other ministries and institutions that are not directly dealing with environmental protection, there is no integrated approach to biodiversity conservation and no joint vision on conservation and development. Other governmental institutions may not even take into consideration conservation of coastal and marine ecosystems, which can lead to inadequate activities in areas of high biodiversity, e.g. construction, fishing, diving, etc.

c. Poor management system and establishment of C / MPAs. The poor management system and stagnation in designation of new C / MPAs affect the efficiency of direct in-situ conservation of biodiversity. Even though there has been done much in assessing the potential new marine and coastal areas to be protected, since the last two decades there have been no new proclamations of coastal and marine PAs (with the exception of Tivat Salina, which is a coastal PA). The existing institutional and legal framework is not capacitated to efficiently expand the existing coastal PAs or manage them. From 1984 until now there has been no management staff employed/appointed for coastal PAs. The low level of professional, operational/managerial capacities in existing coastal PAs and lack of managers/management authorities in general have an important impact on the key ecosystem services and natural values of these areas. Negative trends in the designation of new coastal, but also marine PAs, particularly those of larger size result in need for more efficient models for their designation and management that should be revised with the status of protection of existing PAs.

   Current PA management planning process lacks an inclusive participatory approach. A wide range of stakeholders are not involved in the PA planning process, therefore the sense of ownership over PAs among these stakeholders is lacking. Narrow consultations with stakeholders and local communities at the planning process limits full support of all local and national stakeholders thus puts a barrier on effective implementation of these plans.

d. Lack of public awareness, information availability and exchange: There is little awareness in Montenegro about the importance of biodiversity to local and national economies, the role of local communities, and opportunities that C / MPAs can offer to the local population, including production of sustainable tourism, eco-friendly produce, securing additional sources of funding from the donors and EU, etc. Instead, in some instances, expansion of PAs was perceived as a threat to local tourism, livelihoods of local communities with loss of territory, natural and material resources. Public awareness campaigns and involving local communities in management planning are all instrumental in ensuring public support.

   Since local initiatives' involvement is limited, awareness about the importance of conservation and protection of biodiversity and natural resources and contributed to improvement of tourist offerings in the PAs (diverse agricultural products, traditional souvenirs, etc.) is low, thus cooperation among general public, local governments and administrations of protected areas is not strong.

e. No new designations of PAs in coastal zone of Montenegro over the last couple of decades (with the exemption of Tivat Salinas). Identified zones of vulnerable and valuable biodiversity significantly coincide with the network of the existing and planned C / MPAs. The existing spatial planning documentation contains proposals for placing under protection new PAs in the terrestrial part of the coastal zone. These include the national park Orjen, regional parks Rumija and Vrmac, monuments of nature Ulcinj Salt works, Sasko Lake and Ada Bojana. Even though strategic and planning documents identified future/potential MPAs and envisaged proclamation of three MPAs

as previously described, they have not been established yet. No potential MPAs in the deep sea were so far identified as no scientific research was ever undertaken in the deep-sea water due to constriction of funding.

II.1.2) BASELINE SCENARIO OR ANY ASSOCIATED BASELINE PROJECTS

2. 1. Baseline scenario and baseline projects

Without an intervention for an effective management of the C / MPAs, it seems unlikely that new C / MPAs would be established. This will in turn, limit Montenegro to address conservation and sustainable use of coastal and marine biodiversity. In addition, existing conflicts with coastal communities and user groups in use of ecosystem services and natural resources will continue and exacerbate. Unsustainable tourism and urbanization practices, uncontrolled provision of coastal ecosystem services will lead to further overexploitation of natural resources, habitat loss and fragmentation. With this scenario, it seems improbable that new and up-to-date management practices for C / MPAs will be developed.

Existing knowledge, data and studies on biodiversity, which are partial, cannot cope with the needs of management of natural resources and C / MPAs. Gaps in knowledge and lack of data sets on biodiversity, the status of coastal marine ecosystems will limit scientific research, while the decision makers will make decisions on C / MPAs with limited information and thus impede efficient and sustainable management of C / MPAs, which will subsequently lead to loss of biodiversity values.

Limited information and awareness about the importance of C / MPAs in protection and sustainable use of natural resources will slow down the establishment of new C / MPAs, therefore development and spatial plans may envisage a number of interventions that could endanger natural values of particular sites, whereas stability and resilience of important coastal ecosystems would become uncertain. Protection measures for valuable ecosystems outside nature PAs will not be properly planned and implemented. As a result, degradation of specific coastal habitats and species will continue.

The government will not prioritize development of a comprehensive framework for C / MPAs subsystem; therefore there will be inconsistencies in planning and development of the network of C / MPAs subsystem.

The existing management framework of C / MPAs is not operational, options of rights-based and co-management agreements for long term financial sustainability of C / MPAs are not available, institutional capacity for effective management of C / MPAs is and will remain limited, therefore effectiveness of the management of the current and prospective C / MPAs will be limited causing continuation of biodiversity loss in coastal area.

Nevertheless, certain efforts have been made in regards to preparing the ground for identifying and establishing the PAs within coastal and marine habitats.

Certain primary data required for designation of marine PAs was collected during the Regional Project for the Development of a Mediterranean Marine and Coastal PAs Network through the boosting of MPAs Creation and Management. The Legal and Institutional Framework Assessment for Conservation of Coastal and Marine Biodiversity and Establishment of Marine PAs has identified the priority needs for legal, policy and institutional reforms to strengthen the process of designation and management of marine PAs.

Further on, the Italian bilateral support to the government of Montenegro focuses on activities such as support to environmental management, promoting sustainable tourism and sustainable management of national parks and other PAs. The UNEP/MAP Adriatic project has envisaged several results, including capacity building for improved sub-regional environmental management through implementation of demonstration marine spatial plans. More details on the ongoing projects can be found in table below.

Table 11. List of Baseline Projects

Name of the project, duration	Description of activities and envisaged outcomes
Establishment of Natura 2000 network in Montenegro (2016-ongoing) USD 2,550,000	This project has started in April 2016. The implementation of the Project will be structured in three components, 1. Establishment of grounds for the creation of network of sites called Natura 2000 based on the requirements of Birds Directive and Habitats Directive. The Birds Directive requires the establishment of Special Protection Areas (SPAs) for species listed in Annex I and regularly occurring migratory species. The Habitats Directive similarly requires Special Areas of Conservation (SACs) to be

Name of the project, duration	Description of activities and envisaged outcomes
	designated for species listed in Annex II and habitats listed in Annex I. 2. Comprehensive stakeholder analysis and habitat mapping will be carried out with special focus on: conservation experts (government and independent); and potential / future SPA-stakeholders (land management organizations, national and municipal authorities, NGOs, academics). 3. Propose the list of pSCI that meet the objectives and criteria set out in the Habitats Directive Article 4 (1). The assessment of potential pSCIs will focus on natural habitat types listed in Annex I and the species listed in Annex II of the Habitat Directive that occur in Montenegro.
Bilateral support from Italian Ministry for Environment, Land and Sea in the activities implemented by national authorities in the scope of regular monitoring of the status of marine and coastal biodiversity (2014-ongoing) USD 732,221.00 (for regular monitoring of the status of marine and coastal biodiversity only)	The agreement made between the Government of Montenegro and the Government of Republic of Italy in regards to environmental protection indicated the two Parties would work jointly on the following activities: 1) provision of legal aid in harmonizing national legislation with EU regulations in environmental protection and climate change; 2) support for institutional development and capacity building; 3) monitoring of environmental quality in accordance with EU standards; 4) support environmental management, especially in the area of air quality, climate change, prevention and control of pollution and nature protection; 5) encourage the development of environmentally friendly sources of energy, especially renewable energy sources; 6) promoting sustainable tourism, transport, sustainable use of natural resources and sustainable management of national parks and other PAs; 7) the realization of initiatives related to energy efficiency programs, especially in the construction sector; 8) within the framework of the Mediterranean Action Plan (MAP) the Parties will develop initiatives for the protection of marine and coastal areas, starting with the implementation of the partnership Adriatic Sea Coastal Areas and River Basin Management system (ADRICOSM); 9) co-operation within the framework of international and European programs; 10) other activities agreed between the Parties.
National Programme of Monitoring of the State of Environment (2017) USD 338,913.72	The National Programme of Monitoring of the State of Environment in Montenegro is a Government-financed annual activity that monitors and reports on the state of environment in the entire country based on existing indicators and data, including the coastal and marine area.
Concept for marine spatial planning (2016-ongoing) USD 1,850,000	The strategic objective of the project is to develop a management system that includes all sectors and levels of coastal and marine management, which is to be based on an integrated approach and aims to integrate the management of natural resources, risk prevention and resolution of conflicts between different users on the coast line in Montenegro.
Master plan for the treatment and disposal of wastewater for the Montenegrin coast (2016-ongoing)	The project will implement a Master plan to build and reconstruct the wastewater disposal system in the coast of Montenegro, focusing on major cities. Collectors will be developed in Bar and Tivat and a wastewater treatment plant will be built for Ulcinj, bar and Budva. The wastewater going directly into the sea is one of the major sources of pollution to the coastal biodiversity, which will be managed through this project.

Name of the project, duration	Description of activities and envisaged outcomes
USD 456,069.08	

However, none of the projects managed to fill in the necessary gaps that would lead to establishment of the first MPA and development of sustainable and efficient management of the C / MPA subsystem. The projects have not managed to gather systematized data on biodiversity in Montenegro, which is leading to lack of possibilities to design well-targeted interventions. For that matter, progress and effectiveness of any activity cannot be measured without a solid baseline. The projects have not managed to comprehensively involve all relevant stakeholders, especially the local communities, which remained detached from any action and do not provide support to the initiatives and show resistance. Further on, the projects have not put sufficient focus on awareness raising and building of capacities of relevant authority representatives and management staff, particularly about the importance of biodiversity to local and national economies, the role of local communities, and opportunities that PAs can offer to the local population, including production of sustainable tourism, eco-friendly produce, securing additional sources of funding from the donors and EU, etc. This has led to general lack of awareness and resistance towards expansion of C / MPAs as no public support was ensured and no opportunities for development of sustainable tourism offerings was considered through a strengthened cooperation between the population and the local governments and administrations of PAs. Lastly, the projects have not dealt with making improvements on the existing legislative framework, which have led to delays in project activities and consequently have not had efficient results. For that matter, certain impediments have not been tackled resulting in low impact of existing projects and finally, no MPAs and no possibilities for sustainable management of existing coastal PAs and prospective C / MPAs.

II.1.3) THE PROPOSED ALTERNATIVE SCENARIO, GEF FOCAL AREA STRATEGIES, WITH A BRIEF DESCRIPTION OF EXPECTED OUTCOMES AND COMPONENTS OF THE PROJECT

3.1. Proposed alternative scenario

This proposed GEF project aims to ensure effective management and ecosystem representation of the C / MPA subsystem through addressing its institutional and financial sustainability in order to fill in the gaps presented in the baseline scenario that are prohibiting the establishment of the first marine PAs and securing the efficient management of existing coastal PAs and perspective C / MPAs. For that matter, this GEF project will ensure comprehensive collection and assessment of information on biodiversity and ecosystem values in order to firstly revise the status of the existing coastal PAs and secondly, identify and establish nationally and globally significant marine and coastal sites that are important for biodiversity conservation. In order to tackle poor PA management, the project will determine the capacity and governance needs for successful management of new C / MPAs and establish a management framework in place. Additionally, the project will result in development and implementation of the 10-year business plan that will contribute to more efficient and financially sustainable management of the network of C / MPAs in Montenegro.

The most important activity of the project is the revision of the status of existing nationally protected coastal PAs (which include all public beaches and Tivat Salina) and expansion of the C / MPAs through establishment of three new C / MPAs Platamuni, Stari Ulcinj and Katic. A joint multi-stakeholder C / MPAs working group will be established to ensure participation of all-level stakeholders throughout the process based on the National council for sustainable development, climate change and integral coastal zone management, which is the high-level coordinating body for ICZM in Montenegro. The project will address the gaps in the institutional and legal framework by creating a national planning framework for the C/ MPAs network, including the zoning of tourism development area in selected PAs, Platamuni, Stari Ulcinj and Katic. New staff would be appointed to manage new PAs while integrating the critical components of coastal and marine ecosystems and having their capacities built as well. The financial gap for the management of the Platamuni, Stari Ulcinj and Katic PAs will be reduced through development and implementation of a financial strategy. Further on, guidelines containing all lessons learned from this process will be gathered and developed to be endorsed by relevant institutions to serve further efforts on expansion of PAs.

These will be achieved through two main project components:

Component 1. Protection of valuable coastal and marine biodiversity assets and establishment of the subsystem of integrated C / MPAs and

Component 2. Management effectiveness is ensured in the C / MPAs in Platamuni, Katici and Stari Ulcinj critical land/seascapes.

In order to reach the stated objectives of this component and desired outcomes, a set of activities should be undertaken.

Table 12. Project Intervention Strategy

Project Component Expected Outcomes/Outputs	Activities
1 Protection of valuable coastal and marine biodiversity assets and establishment of the subsystem of integrated C / MPAs	
1.1 Representative Coastal and Marine Protected Areas identified to protect key coastal and marine ecosystems and biodiversity of global importance	
1.1.1 The biodiversity and ecosystem services of coastal and marine ecosystems are assessed and nationally and globally significant sites for biodiversity conservation are identified as per national and international standards and requirements (UN CBD /Aichi targets and other, including EcAp, GES, Natura and Emerald network, etc.)	1.1.1.1 Prepare and undertake a survey campaign in the coastal area of Montenegro covering 93,243.48 hectares
	1.1.1.2 Assess the biodiversity and ecosystem services against national and international standards
	1.1.1.3 Identify the nationally and globally significant sites for biodiversity conservation
1.1.2 Comprehensive database on the status of coastal and marine ecosystems is established as to support science policy interface for protection of biodiversity assets and harmonization of development plans with the value of biodiversity assets	1.1.2.1 Establish comprehensive data sets and GIS mapping for the entire coastal area of Montenegro and align with work of other regional projects (including Adriatic project)
1.2 Management framework in place involving all relevant stakeholders for (i) network of C / MPAs in Montenegro; (ii) expansion of C / M PAs; (iii) compatibility of land/sea/natural resources usage with overall biodiversity management goal	
1.2.1 Capacity and governance needs, including technical needs, human resources (including gender) and legislation needs for successful management of C / MPAs identified	1.2.1.1 Review of human and technical capacities and governance and legislative framework for the management of C / M PAs
	1.2.1.2 Undertake an analysis of the collected data with view of successful management of C / M PAs
	1.2.2.3 Identify members of the C / MPAs working group

Project Component Expected Outcomes/Outputs	Activities
1.2.2 Joint multi-stakeholder C / MPAs working group established to form management framework for project implementation	1.2.2.2 Determine the scope of work for the working group
	1.2.2.3 Organize the first work group meeting
1.2.3 National planning framework for the network of C / MPAs is prepared, including the roles and responsibilities of State, private sector, and communities (diversified by gender) for C / M PAs management clarified	1.2.3.1 Review of the current PAs planning framework
	1.2.3.2 Identify gaps and opportunities
	1.2.3.3 Design the national planning framework for the network of C / MPAs to be consulted with the relevant government authorities
	1.2.3.4 Clarify the roles and responsibilities of different relevant actors
1.2.4 10-Year Business Plan developed and implemented for the expansion and effective management of the network of C / MPAs, including activities on promotion of C / MPAs in the context of sustainable tourism development	1.2.4.1 Drafting of the 10-Year Business Plan
	1.2.4.2 Design of activities on promotion of C / MPAs in the context of sustainable tourism development in consultation with relevant cross-sectoral actors
1.2.5 Awareness of decision-makers on the economic benefits of a well-managed network of C / MPAs, including sustainable use of coastal and marine habitats is increased	1.2.5.1 Organize a national conference on sustainable use of coastal and marine habitats
1.2.6 Development of the communication strategy to ensure outreach on the activities and benefits of the project for the local, national and international community	1.2.6.1 Design the communication strategy
	1.2.6.2 Implement the strategy through organizing workshops with local communities
	1.2.6.3 Develop a public campaign to be implemented on national level
	1.2.6.4 Assure participation of the relevant government representatives to at least three international conferences in order to share information about best practices in C / MPA management
1.2.7 Development of an assessment of socio-economic impacts on local population by establishing new C / MPAs	1.2.7.1 Undertake consultations with local population on socio-economic impacts
	1.2.7.2 Develop the assessment in coordination with the national laws and regulations
	1.2.7.3 Submit the assessment to the government for consultations
	1.2.7.4 Undertake any other relevant activity deemed necessary by the assessment

Project Component Expected Outcomes/Outputs	Activities
1.3 Status of protection for existing coastal PAs covering 13,012.19 hectares revised and plans for expansion of the PA network covering 2,301.2 ha in the coastal area of Montenegro defined	
1.3.1. Necessary documents for revision of existing coastal PAs covering 13,012.19 hectares prepared and submitted for adoption	1.3.1.1 Develop the studies for revision of the existing coastal PAs to be submitted for consultation with the government
	1.3.1.2 Prepare the legal instruments for the revision of the status of the existing coastal PAs
1.3.2 Plans for expansion of the PA network in the coastal area of Montenegro prepared and submitted for adoption	1.3.2.1Develop the plans for expansion of the PA network to be submitted for consultation with the government
1.4 Priority integrated C / MPAs established, namely Platamuni, Katici and Stari Ulcinj covering at least 2,301.2 hectares	
1.4.1 Study on nature protection and other required documentation for establishing three priority integrated C / MPAs prepared, including zoning applicable for spatial planning documentation	1.4.1.1 Develop three studies for establishing the new C / MPAs
	1.4.1.2 Design the zoning plans for the three new C / MPAs
	1.4.1.3 Prepare the legal instruments for proclamation of the three new C / MPAs
1.4.2 Consultation process ensuring gender balance provided prior to adoption acts on establishing three new integrated C / MPAs	1.4.2.1 Organize consultations with relevant stakeholder groups on the proclamation of the three new C / MPAs
	1.4.2.2 Ensure participation of at least 50% of women
1.4.3 Legal instruments for establishing the new PAs are prepared and the adoption requests for the three new C / MPAs are submitted	1.4.3.1 Prepare the legal instruments for adoption for the three new C / MPAs
	1.4.3.2 Prepare the adoption requests for establishment of the three new C / MPAs
2 Management effectiveness is ensured in the C / MPAs in Platamuni, Katici and Stari Ulcinj critical land/seascapes.	
2.1 Improved C / MPA management effectiveness in three newly established C / MPAs Platamuni, Katici and Stari Ulcinj	
2.1.1 Assessments for setting up management of integrated C / MPAs, including rights-based and co-management agreements for long term financial sustainability in line with the national framework	2.1.1.1 Develop best possible models for C / MPAs management
	2.1.1.2 Develop the rights-based and co-management agreements for long term financial sustainability

Project Component Expected Outcomes/Outputs	Activities
2.1.2 Management plans for three new C / MPAs developed with integrated financial strategy to reduce financing gaps	2.1.2.1 Design the Management Plans for the three new C / MPAs
	2.1.2.2 Develop the Financial Strategy to be integrated in the Management Plan for the three new C / MPAs
2.1.3 Tourism development area plans developed for three new C / MPAs to be integrated in the spatial planning	2.1.3.1 Design the tourism development area plans in accordance with sustainable management of C / MPAs
	2.1.3.2 Prepare the plans for integration in the spatial planning documents
2.1.4 Employment of management and staff for the three new C / MPAs facilitated[83] and their capacities raised for effective PA management	2.1.4.1 Development of the proposal for new management structure to employ new staff and submission to the government
	2.1.4.2 Preparation of necessary documents for employment of staff
	2.1.4.3 Training of management staff and officials in PA management approaches
2.1.5 A monitoring and enforcement system developed and implemented to reduce threats to biodiversity in C / MPAs and their buffer areas and ensure effective PA management	2.1.5.1 Development of the monitoring and enforcement system
2.2 Lessons learned platform for establishment and effective management of C / MPAs guiding future efforts on expansion of PAs	
2.2.1 Guidelines with lessons learned developed and endorsed by the relevant institutions, including recommendations on changes to national legislation.	2.2.1.1 Collection of the main lessons learned from the project
	2.2.1.2 Development of the guidelines
	2.2.1.3 Submission of the guidelines for endorsement by relevant institutions

The first component aims to confirm three first ever priority C / MPAs as a foundation for the C / MPA network that will provide effective protection of key coastal and marine ecosystems in Montenegro. Procedure of establishing new C / MPAs will follow national legal requirements (Law on Nature Protection, 2013). In order to do so, a comprehensive assessment of the entire coastal area of Montenegro will be undertaken, covering 93,243 hectares with the aim of filling in knowledge gaps on the status of biodiversity assets in the entire coastal zone. The assessment will be undertaken in compliance with national and international standards and requirements, including UN CBD/Aichi targets and other, EcAp, GES, Natura and Emerald network, etc. This component should result in the four following outcomes:

- Representative C / MPAs identified to protect key coastal and marine ecosystems and biodiversity of global importance

[83] GEF funds will not be used for the staff salaries

- Management framework in place involving all relevant stakeholders for (i) network of C / MPAs in Montenegro; (ii) expansion of C / MPAs; (iii) compatibility of land/sea/natural resources usage with overall biodiversity management goal
- Status of protection for existing coastal Protected Areas covering 13,012.19 hectares revised and plans for expansion of the PA network covering 2,301.2 ha in the coastal area of Montenegro defined
- Three priority integrated C / MPAs established, namely Platamuni, Katici and Stari Ulcinj covering at least 2,301.2 hectares

Assessment of biodiversity and ecosystem services

Assessment of the coastal and marine ecosystems shall be undertaken through a research campaign that will result in comprehensive data sets and GIS mapping in compliance with national and international standards and requirements (UN CBD/Aichi, Natura / Emerald, EcAp, GES, etc.). This will result in identification of the nationally and globally significant sites for biodiversity conservation, including identifying borders of the three priority C / MPAs with precision, i.e. exact boundaries, zoning and clearly defined regimes of their protection. The database will need to provide information on the valuable biodiversity assets in both marine and coastal areas in order to fill in all remaining gaps in knowledge. It will also help determine the status of coastal and marine ecosystems in order to support the science policy interface for protection of biodiversity assets and harmonization of development plans with the biodiversity values. Consequently, the project research area will cover 93,243.48 hectares of coastal area of Montenegro, including: (i) Terrestrial Mediterranean zone that is spread between 0 and 400 m a.s.l. and (ii) Marine zone that is appropriate for diving surveys in depth of 0 - 50 m, as presented in Figure 7.

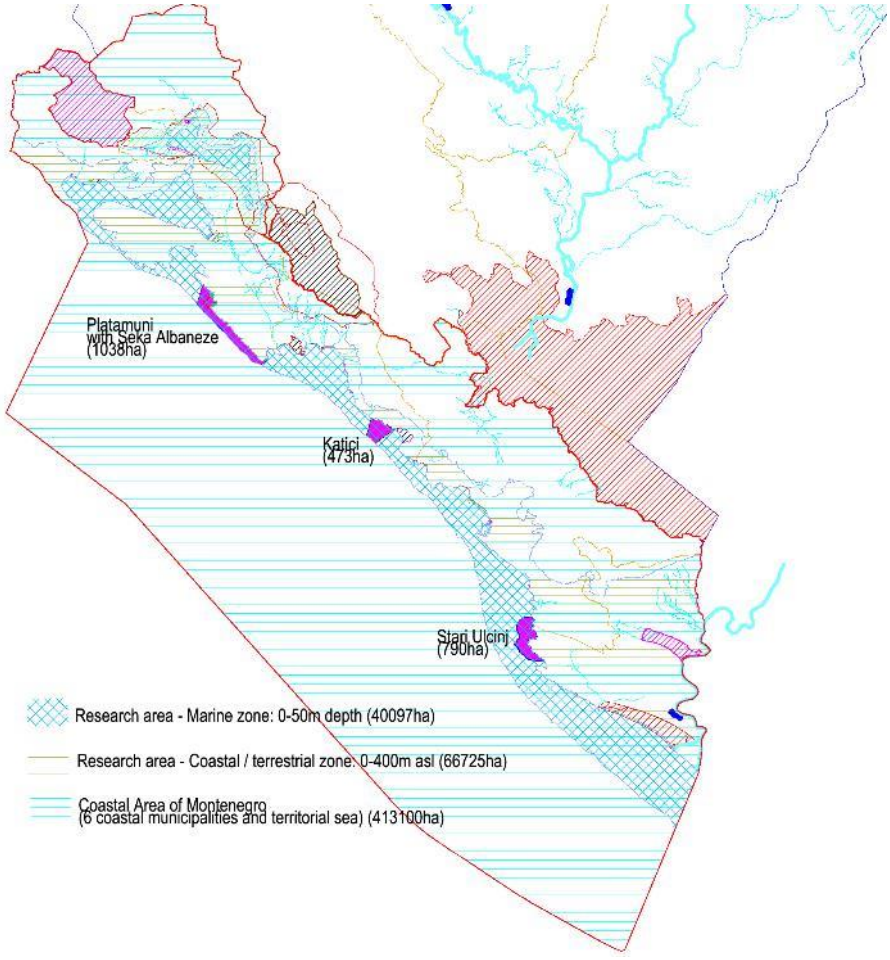


Figure 7. Map of zones / areas where research will be conducted

Effective management framework in place

The second part of the first component will focus on setting up framework for efficient management of the C / MPAs. Firstly, roles and responsibilities of all actors in the management of the C / MPAs will be clarified, including the government, private sector and local communities with regards to gender considerations. Secondly, the most relevant needs in regards to capacities and governance for successful management will be identified, including the technical, human resources (taking into consideration the gender) and legislation needs. Prior to these activities, a joint multi-stakeholder working group will be established in order to ensure proactive participation of all-level stakeholders and to ensure ownership of the project while being involved throughout the project and the process of establishment of the new C / MPAs, and what is very crucial, from the very beginning. Furthermore, the joint working group will work hand-in-hand with the country coordination offices formed by the Adriatic project (please see A8. Coordination for more reference). In this way, full ownership and cross-sectoral cooperation is facilitated. Based on the identified needs and complementary to the procedure defined in the legislation, a national planning framework for the C / MPAs network will be prepared while engaging all core stakeholder groups and relevant ministries in order to identify any gaps and opportunities and propose best possible solutions in regards to C / MPAs planning. In order to tackle the issue of bird hunting, the project will propose a review of relevant legislation regarding hunting of birds and wildlife in order to limit the hunting of migratory and endangered bird species in the coastal and marine area of Montenegro, together with increasing awareness through design of visual guidelines to help identify migratory and endangered species. In addition to the national framework, a 10-Year Business Plan will be developed and set up for implementation in order to provide development framework for expanding the network of the C / MPAs and effectively managing it. The Business Plan will also contain activities on promotion of C / MPAs in the context of sustainable tourism development aiming at both the relevant decision makers and representatives of the private sector and local communities. Proactive participation of all relevant stakeholders, with focus on gender balance and participation of any indigenous and traditional communities, throughout the entire project will be ensured. By implementing these activities the project will tackle the issue of poor harmonization of legal and inter-institutional responsibilities. Implementation of all project components shall involve all necessary gender/specific needs, priorities and perspectives.

Awareness raising

Effective management is only possible if all decision makers are fully aware of the economic benefits of a well-managed network of coastal and marine PAs and all relevant stakeholders are involved in the process of designing the management framework. In order to raise and increase awareness of the decision makers on the economic benefits of a well-managed network of C / MPAs, including sustainable use of coastal and marine habitats, a national conference will be organized. By this, the project aims to ensure cross-sectoral integration of environmental protection and the importance of C / MPAs on all levels of government, where compromise and synergy between development and conservation are sought. Further on, the project will develop a communication strategy based on proactive participation of all relevant stakeholders for awareness raising on the activities and the benefits of the project to general public and local communities.

The communication strategy focuses on sustainable use of coastal and marine habitats taking into consideration gender and youth mainstreaming, through conducting gender–sensitive advocacy involving all stakeholders, including local communities, private sector, beside local authorities and national government as decision makers. The strategy will build upon previous efforts of different initiatives and projects and it will outline the purpose and goals of well-managed C / MPA subsystem, how the benefits of this subsystem is permeating the work of the government officials, and most importantly, to ensure the ownership of relevant stakeholders over the project, especially the processes on establishing the three new C / MPAs. The strategy will be implemented through organizing workshops with local communities diversifying the actors from public to private. Further on, the strategy will include development of a public campaign to be implemented at national level in order to raise awareness of general public, not only the population closely connected to the C / MPAs. The strategy will also assure relevant government representatives participate in at least three international conferences in order to share information about best practices in C / MPA management and insure international outreach of the project. The representatives will have the possibilities to extend the outreach of the awareness raising communication strategy and collect new knowledge and practices to be shared nationally through the framework of the communication strategy.

The communication strategy will be created for the project purposes but will also give way to continuation of activities on awareness raising through providing elements for future work on promotion executed by the relevant government authorities after the project finishes. The sustainability of the strategy for exchange of knowledge and practices will be established by government representatives through different tools, while the same will be continued through designated activities in each management plan of the new C / MPA. With implementation of the communication strategy and all its

elements, the project will address two barriers to effective conservation of biodiversity, including limited public and political awareness on biodiversity values and limited institutional capacities.

Further on, an assessment of socio-economic impacts on local population by establishing new C / MPAs will be developed to identify and mitigate any potential negative impact of the project. Within this activity, thorough consultations will be undertaken with local population (through workshops from activity 1.2.6.2), after which an assessment in coordination with the national laws and regulations to be submitted to the government for consultations. Based on the results of the assessment, any other activity may be facilitated, including, if necessary, a livelihood restoration plan.

Revision and expansion of C / MPAs

The comprehensive database established based on research campaign from the first part of the component will also serve as a basis for revision of the existing coastal PAs in order to discover whether the initial values of these areas have changed and consequently determine their status and category of protection. The status of protection of existing coastal PAs shall be thus revised in order to include all significant marine and coastal ecosystems. Studies for revision of the status of existing coastal PAs will be developed and submitted to the government for consultations, after which the acts for revision of the status will be established. Plans for expansion of the PA network in accordance with the Montenegrin legislation will follow and precede the process of proclamation of new PAs. Further on, the project will focus on expansion of the C / MPAs network that will integrate the coastal and marine ecosystems over approximately *2,301.2 hectares* in the zones of *Platamuni, Katici* and *Stari Ulcinj* into three new C / MPAs. Documentation required by regulation (Law on Nature Protection 2008, 2013) shall be provided for the process of establishing these three new C / MPAs. Firstly, a study on nature protection shall be undertaken, including necessary zoning applicable for spatial planning documents. Secondly, acts on establishing the three new C / MPAs will developed and adopted, leading to establishment of the new C / MPAs. The process of proclamation is elaborated in Table 6. Consultation process will be provided prior to adoption of the acts on establishing the three new C / MPAs taking due consideration to gender balance. Raised and increased awareness of decision-makers on the economic benefits of a well-managed subsystem of C / MPAs should ensure successful implementation in the practice. The process will result in development and submission of the acts on establishing the new PAs and proposal for establishment of the three new integrated C / MPAs.

Establishment of three new C / M PAs shall provide better conservation of coastal and marine biodiversity and globally important *Posidonia* assemblages, in particular. Consequently, project activities in the Component 1 shall lead way to the second component, which would facilitate elimination and/or mitigation of existing pressures to coastal and marine biodiversity in the three new C / MPAs through its effective and sustainable management.

The final result of this component shall lead to **increased total cover of C / MPAs in coastal area (territory of 6 coastal municipalities) for 2,301.2 ha.** The three new C / MPAs will be established to represent more than **2.4%** of the total research area initially undertaken in the entire coastline of Montenegro (as per Figure 5). Further on, this component will lead to increase of 1.5% per annum in distribution of *Posidonia oceanica* as an endangered species and important habitat endemic to the Mediterranean Sea.

Second component is focused that the management effectiveness is ensured in the C / MPAs in the Platamuni, Katici and Stari Ulcinj critical land/seascapes. Within this component, two main outcome are expected:

- Improved C / MPAs management effectiveness in three newly established C / MPAs Platamuni, Katici and Stari Ulcinj
- Lessons learned for establishment of C / MPAs collected to guide future efforts on expansion of PAs

Improved PA management effectiveness in new C / MPAs

The first part of the component will focus on improving PA management effectiveness for the three new C / MPAs. First activity is to undertake assessments for setting up the management of new C / MPAs rights-based and co-management agreements for long term financial sustainability in line with the national framework, taking due consideration to the role of women and vulnerable and minority ethnic and religious groups. Based on the undertaken assessment, management plans will be developed for each new C / MPAs with integrated financial strategy. Financial strategy to reduce the financing gap for the management of the new C / MPAs, including revenue generating mechanism will be developed and submitted to the government for adoption. After the establishment of the PAs, tourism development zones within the C / MPAs will be defined. As a part of the management plans, new management structure will be designed for employment of new staff, which will result from a comprehensive consultation process with all relevant stakeholders in order to build

consensus and to ensure sustainability of the structure. Following this action, necessary documents for employment of staff will be prepared to open new positions in the three new C / MPAs. The processes of development and adoptions of the management plans for the three new C / MPAs will follow the requirements in national legislation and the indicated protocol in the Table 6 of this document. In order to ensure effective implementation of sustainable management of C / MPAs training of management staff and relevant officials in C / MPA management approaches will be undertaken. Minimum 30, out of which significant number of women will be trained, based on training modules validated and accepted by relevant authorities. The training components will focus on effective C / MPA governance and management, developing skills of and knowledge and technology transfer to the C / MPA staff and relevant officials through sharing local and international experiences on best practices, making sure the traditional knowledge makes part of the learning lessons. Further steps in ensuring effective management of the new C / MPAs are reflected in increasing monitoring capacities. A monitoring and enforcement system for the integrated C / MPAs subsystem shall be developed and implemented to reduce threats to biodiversity in marine and coastal PAs and their buffer areas. The assessment undertaken in the first part of the first component will serve as a basis against which the monitoring will be done. The management staff training will also include the component on the basic monitoring measures that will facilitate the monitoring process made by C / MPA staff on a daily basis in the new C / MPAs.

Lessons learned for establishment of C / MPAs collected to guide future efforts on expansion of PAs

In order to assure the best practices applied in this project are further on applied in future establishment of PAs, the second part of the second component will focus on developing the guidelines with lessons learned to be endorsed by the relevant institutions, which would provide a guarantee the guidelines will be integrated in the work of the institutions responsible for establishing PAs and to avoid any obstacles in future expansion and management of the PA network.

All activities within this component will jointly contribute to **strengthening C / MPA operations to cover an area of 2,301.2 hectares**, leading to an increase in coverage of the protected coastal and marine ecosystems of Montenegro. This set of activities will lead to **tackling one of the most important barriers to biodiversity conservation in Montenegro, which include ineffective management system of C / MPAs**, while ensuring inclusive consultation processes and transparent decision-making processes with special focus on marginalized populations and traditional way of doing in order to ensure fairness and sustainability of the new C / MPAs.

More detailed information on the project activities is given in Annexes A: Project Logical Framework and I: Key Deliverables and Benchmarks, but also Annex C: Workplan and Timetable.

3.2. Compliance with GEF focal area strategies

The project is in line with the BD-1 strategy and Programs 1 and 2.

BD-1 Program 1

- Improving Financial Sustainability and Effective Management of the National Ecological Infrastructure

The project aligns with the following requirements of Program One:

- New financing strategies for PA systems are critical to reduce existing funding gaps and improve management (development of financial strategies for the three new C / MPAs)
- Targeted capacity building for adequate response to commercial opportunities for PAs is also required (opportunities for tourism development are included in the training agenda for the capacity building of decision makers)
- Support to improving PA financial sustainability and effective management (development of Management and Strategic Plan and Financial Strategy)
- Proportion of any revenue increase in the new PAs will be absorbed by system-level administration and management costs to be integrated in the Management Plan and Financial Strategy of the three new C / M PAs)
- Prioritizes the development and implementation of comprehensive, system-level financing solutions (to be integrated in the Financial Strategy of three new C / M PAs)
- Must be part of a larger sustainable finance plan and context (development of the 10-Year Business plan on the level of the C / M PAs)

BD-1 Program 2

- Nature's Last Stand: Expanding the Reach of the Global Protected Area Estate

The project aligns with the following requirements of Program Two:

- Contribute to the achievement of Aichi Target 11 to conserve 17% of terrestrial and inland water, and 10% of coastal and marine areas – globally significant (expansion of the PA system up to 2,301.2 hectares of coastal and marine areas that are of global significance)
- Link plans for expansion with the associated financing strategies supported through Program One (the developed plans will have a potential for replication and scaling up due to development of the national framework)
- Increase representation of globally significant marine ecosystems in PA systems (establishment of three C / M PAs)
- Address marine ecosystem coverage gap within national level systems through creation and effective management of coastal and near shore PA networks, including no-take zones, to conserve and sustainably use marine biodiversity
- Creation of new PAs to expand terrestrial and inland water ecosystem representation within PA systems through establishment of three new C / M PAs
- Creation of new PAs that improve the coverage of the spatial range of threatened species through establishment of three new C / M PAs

Aichi Biodiversity Targets

Through developing and undertaking communication strategy to raise awareness of general public on the importance of biodiversity values in C / MPAs, the project will contribute to **Target 1.** By conserving biodiversity in the three new C / MPAs, including important habitats, the project will contribute to **Target 5.** Through these measures, the project will also contribute to **Target 7.**

This project will also contribute to **Target 11** by increasing the PAs by 2,301.2 hectares, as mentioned in the Program Two of the GEF focal area strategies. Also, knowledge on Mediterranean Bioregionalism will be improved for the significant part of its Northern component – Adriatic Sea that belongs to Montenegro. Project will reduce threats to, and stabilization of the populations of globally threatened *Posidonia* assemblages. Project will provide application of new approaches in the conservation and management of coastal and marine ecosystems and their sustainable use, as well.

By preserving valuable biodiversity and globally threatened species identified in the new C / MPAs, the project will also contribute to achieving the **Target 12.** Through conducting the research in the entire coast of Montenegro, the project will contribute to increasing knowledge related to biodiversity and its values and thus will contribute to **Target 19** as well.

Sustainable Development Goals (SDGs)

The project will also contribute to several SDGs. Through preserving environment in selected sites, ensuring pollution is minimized and managed, abundance of natural resources is improved, and the project contributes to **SDG 3.** The project will ensure through the effective and sustainable management of C / MPAs sustainable consumption and production of natural resources, and will contribute to **SDG 12.**

Further on, the project will contribute to **SDG 13** and **14**, Climate Action and Life Below Water, respectively, through ensuring resilience of the ecosystems with sustainable use and effective management of coastal and marine habitats.

II.1.4) INCREMENTAL/ ADDITIONAL COST REASONING AND EXPECTED CONTRIBUTIONS FROM THE BASELINE, THE GEFTF AND CO-FINANCING

A summary of the incremental reasoning for the project is presented in the table below, based on the baseline analysis and the elaboration of the project component in the section 3. It compares the outcomes of the current baseline (business as usual scenario) with the expected outcomes of the alternative scenario (with project interventions), thus refining the benefits for biodiversity at global and national levels that can be attributed to the project as its incremental contribution.

Table 13. Summary of Incremental Reasoning

Baseline Scenario B (Business As Usual)	Alternative Scenario A (with project interventions)	Increment (A – B)
Component 1: Protection of valuable coastal and marine biodiversity assets and establishment of the integrated subsystem of C / MPAs **Baseline:** ▪ Gaps in knowledge and lack of data sets on biodiversity in the country and particularly in the coastal (terrestrial and marine) area (no comprehensive data sets) ▪ Lack of data on the status of coastal marine ecosystems – previously collected data are partial and encompass small number of parameters ▪ Scientific research are rarely implemented, and generally on a limited scale and as part of individual projects supported with funds from international sources ▪ Lack of capacities for effective management of the C / MPA subsystem ▪ Lack of awareness on the benefits of well-managed network of C / MPAs ▪ Insufficient network of national PAs (12.75% of the country is protected or 176,117ha), no MPA, i.e. C / MPAs ▪ Establishment of new PAs / C / MPAs is slow and inefficient **Probable results:** ▪ Development and spatial plans envisage a number of interventions that could endanger natural values of particular sites, whereas stability and resilience of important coastal ecosystems would become uncertain ▪ Since protection measures for valuable ecosystems outside nature PAs are rarely planned and	▪ Establishing new C / MPAs enabled ▪ Network of PAs expanded ▪ Establishment of the first ever marine PA ▪ Conflicts in the existing use of space eliminated and/ or mitigated through sea and land use optimization ▪ Set of issues to achieve sustainability are determined through analysis of the main features and characteristics of terrestrial and marine ecosystems, including main loads of pollution and anthropogenic impacts to ecosystems ▪ The ecosystem assessment guides the revision of existing and establishment of new marine and coastal PAs ▪ Development of the national planning framework for PA system ▪ 10-Year Business Plan developed for the expansion and effective management of the network of coastal and marine PA system, including activities on promotion of C / MPAs in the context of sustainable tourism development ▪ Increased awareness of decision makers on economic benefits of well-maintained PA network ▪ Outreach established on local and international level on the benefits of the project	**Local/national benefits:** ▪ Comprehensive database on the status of coastal and marine ecosystems established as to support science policy interface for protection of biodiversity assets and harmonization of development plans with the value of biodiversity assets ▪ Subsystem of C / MPAs established in compliance with the country's legal, institutional and budgeting baseline for PA system ▪ Capacities of relevant authorities raised ▪ National planning framework for PA system in Montenegro is developed providing consistency in PA management and leading way to establishment of the PA network ▪ Protection of bird species against hunting by establishing protected areas (according to state Law on Wildlife and Hunting[84], hunting is not allowed or is limited in the PAs) and revision of the legislation allowing protection of the migratory and endangered bird species ▪ PA system has a 10-Year Business Plan providing sustainable development of the PAs, including tourism, which is the national driving economic force **Global benefits:** ▪ Mediterranean bioregionalism improved with the knowledge on the significant part of its Northern component – Adriatic sea that belong to Montenegro ▪ Reduction of threats to and stabilization of the populations of globally threatened species *Posidonia oceanica* ▪ PA system is in line with international standards facilitating

[84] Official Gazzette of Montengro No. 52/2008

Baseline Scenario B (Business As Usual)	Alternative Scenario A (with project interventions)	Increment (A – B)
implemented, it results in frequent examples of degradation of specific coastal habitats and species ▪ No comprehensive framework for PA network causes inconsistencies in planning and development of the of C / MPA subsystem		protection of globally significant BD and application of international standards and requirements ▪ Contribution to the global Aichi Targets 1, 5, 11 and 12. ▪ Contribution to the SDGs: 3, 12, 13 and 14.
Component 2: Management effectiveness is ensured in the C / MPAs in Platamuni, Katici and Stari Ulcinj critical land/seascapes. **Baseline:** ▪ The existing management framework for the subsystem of C / MPAs is not operational, integrated C / MPAs have no adequate management option for possible rights-based and co-management agreements for long term financial sustainability of C / MPAs ▪ Lack of capacities for effective management of PAs ▪ No managers established / employed for PAs (C / MPAs) in the coastal zone since 1968, i.e. 2014 when is appointed only one manager for a coastal PA Tivat Salina) ▪ No effective monitoring system for the PAs in place **Probable results:** ▪ Continuation of a state with no direct management authority(ies) operational for the management of PAs in coastal area which could lead to biodiversity loss	▪ Effective management for the subsystem of C / MPAs established and operational ▪ Setting up of the management framework for the subsystem of C / MPAs ▪ Establishment of the management structure and employment of PA management staff ▪ Capacities for effective management of the three new C / MPAs built ▪ Monitoring system enforcing conservation of biodiversity in place	**Local/national benefits:** ▪ Project outputs will enable management framework for C / MPA subsystem and catalyse further improvement of the PA system in the country ▪ PA network expanded through revision of the existing coastal PAs and the establishment of at least three new C / MPAs ▪ New management structure is in place leading way to employment of management staff for the new PAs, whose capacities are built in accordance with sustainable management of PAs ▪ Decision makers and staff are aware of the benefits of well managed PAs ▪ Outreach to international community ▪ Monitoring of biodiversity in the PAs facilitated **Global benefits:** ▪ Globally significant biodiversity assets are maintained in a sustainable way ▪ International community has the possibilities of exchanging knowledge and information on the activities and benefits of the project ▪ Information on biodiversity in Montenegrin part of Adriatic Sea is available through comprehensive monitoring system ▪ New approaches in the conservation and management of coastal and marine ecosystems will be applied

Baseline Scenario B (Business As Usual)	Alternative Scenario A (with project interventions)	Increment (A – B)
		including best international practices for the integration of ecosystem services into legislation and sectoral planning ▪ Contribution to global Aichi Targets 1, 5, 7, 11, 12 and 19. ▪ Contribution to the SDGs: 13.

II.1.5) GLOBAL ENVIRONMENTAL BENEFITS

Global environmental benefits (GEBs) resulting from GEF's biodiversity financing consistent with this project include:

- Conservation of globally significant biodiversity
- Sustainable use of the components of globally significant biodiversity

The GEF-supported alternative scenario will generate the following GEBs:

Table 14. Review of Global Environmental Benefits

Baseline	Alternative Scenario	Global Environmental Benefits
▪ Lack of data on the status of coastal marine ecosystems – previously collected data are partial and encompass small number of parameters	▪ Comprehensive assessment of the entire coastal area of Montenegro to identify ecosystem services	▪ Conservation of globally significant biodiversity will be provided by reduction of threats to, and stabilization of the populations of globally threatened species and important habitat *Posidonia oceanica*
▪ Lack of data on the status of coastal marine ecosystems – previously collected data are partial and encompass small number of parameters	▪ Comprehensive assessment of the entire coastal area of Montenegro	
▪ Scientific research is rarely implemented, and generally on a limited scale and as part of individual projects supported with funds from international sources	▪ Comprehensive assessment of the entire coastal area of Montenegro to identify ecosystem services	
▪ Insufficient network of national PAs (12.75% of the country is protected or 176,117 ha), no MPA, i.e. C / M PAs	▪ Establishment of new C / MPAs is enabled	
▪ Establishment of new nature PAs is slow and inefficient		
▪ The existing system of PAs lacks marine PAs	▪ Establishment of the first ever marine PA is enabled	
▪ The existing management framework for the subsystem of C / MPAs is not operational, integrated C / MPAs have no adequate management option for possible rights-based and co-management agreements for long term financial sustainability of C / MPAs	▪ Establishment of the management framework for the C / MPAs subsystem	▪ Sustainable use of the components of globally significant biodiversity will be provided by applying new approaches in the conservation and management of coastal and marine ecosystems that are based on best international practices for the integration of ecosystem services into legislation and sectoral planning
▪ Lack of capacities for effective management of C / MPAs	▪ Management and staff of new C / MPAs is trained to have their capacities built in effective management of C / MPAs	
▪ Lack of awareness on the benefits of well-managed network of C / MPAs	▪ Awareness of decision-makers on the economic benefits of a well-managed network of C / MPAs, including sustainable use of coastal and marine habitats raised and increased	

Baseline	Alternative Scenario	Global Environmental Benefits
▪ No managers of protected natural assets in the coastal zone have been established in the period 1968 – 2014	▪ Management structure for appointment of new managers for at least three C / MPAs	

II.1.6) INNOVATION, SUSTAINABILITY AND POTENTIAL FOR SCALING UP

Innovation

The innovativeness of the project reflects in the establishment of the first ever marine PA and C / MPA in the country in the last decades. Procedure for establishing three new C / MPAs will be provided in compliance with national regulation, but also the national and international standards and requirements (UN CBD/Aichi, Natura / Emerald, EcAp, GES, etc.), which was usually not the case – e.g. the categorization of the existing PAs is not in accordance with IUCN standards. Project will undertake revision of existing coastal PAs and develop national planning framework for the C / MPA subsystem. All these activities shall be done when the assessment (survey, fieldwork and GIS mapping) of the coastal and marine ecosystems is conducted for the first time ever in a comprehensive way to identify nationally and globally significant biodiversity assets. This project offers a comprehensive and inclusive approach to biodiversity planning and C / MPA management and will thus bring innovativeness to the national level actions. Developing an effective system for capturing biodiversity data will contribute to the identified need for better integrated national management of nature. The key innovative approach is the planned tailor specific and not generic approach in developing tools and measures to strengthen the capacity of conservation authorities and C / MPA managements in Montenegro in handling of the national C / MPA subsystem. It also focuses on developing policy and strategic and financial response and experience on new and emerging trends in conservation planning and management. Lessons learned and experience in this approach will be useful to Montenegro in its future efforts, but also other countries in the Western Balkans sub-region as they build up their national PA systems.

The project will also build effective management framework that does not exist so far. Management framework will be designed as an innovation in the national PA system by modelling management structures for integrated C / MPAs, including possible rights-based arrangements and co-management. Relevant international experience will be used in designing the management plans for integrated C / MPAs.

Involvement of the wide range of stakeholders, including local communities and decision makers from other sectors, although relevant and necessary for any successful biodiversity action, has often been overlooked or under practiced. In order to elevate and utilize collaboration and communication between the project stakeholders, the project envisions far enhanced participatory engagement in expert working groups, stakeholders and other authorities that would make the needed difference in mainstreaming important project components while enabling awareness rising in the local communities and providing a step forward for development of a healthy nature conservation system (currently non-existent in Montenegro). Innovative training and conservation benefits communication tools will be developed for continuous training beyond the project cycle and can be used for replication in other for similar projects to achieve global environmental benefits.

The project will also build upon experiences of MedPan and RAC/SPA initiatives in the region and Montenegro itself. Even though a lot of work has been done in the Mediterranean in relation to C/MPAs, this is the first such national project. The project will fill in the gaps within the projects impacts' in the Mediterranean region, as this project, even though in the scope of the many regional projects, will seek to achieve what regional projects have built upon but have not managed to achieve – national commitment and endorsement in view of establishing new C/MPAs.

Sustainability

The project's sustainability shall be reflected through ecological, institutional, social and financial sustainability of new C/MPAs.

Ecological sustainability shall be achieved through 1) research and assessment (survey, fieldwork and GIS mapping) of nationally and globally significant coastal and marine ecosystems in the research area composed of coastal Mediterranean zone (0-400m a.s.l.) and marine zone adequate for diving surveys (0 - 50 m depth) in order to determine the globally significant biodiversity assets, 2) revision of the status of protection for existing coastal PAs and expansion and inclusion significant marine and coastal ecosystems in the subsystem of C / MPAs.

Institutional sustainability shall be achieved through creating a national planning framework for the subsystem of integrated C / MPAs including clarification of the roles and responsibilities of State, private sector and local communities. Reducing of financing gaps and sustainability of the management framework will be provided by integrating financial strategies in the management plans for three new C / MPAs. Sustainable use of ecosystem services that provide three new C / MPAs will contribute to the sustainability of the management operations.

Social sustainability will be enhanced through the implementation of a number of individual stakeholder engagement processes developed for each of the project activities in both the C / MPA subsystem planning and the revision of costal PAs. Stakeholder engagement plans for the respective project activities will be drafted to direct broad-based stakeholder involvement in all aspects of C / MPA subsystem planning and development. The project will further identify mechanisms for the ongoing constructive engagement of communities and the civil society organizations in C / MPA planning, development and operations, notably through partnerships, co-management and co-operative governance. Mechanisms for optimizing the beneficiation of local communities will be identified for the newly established C / MPAs.

Financial sustainability will be provided through the 10-Year Business Plan, which will be developed as a part of the national framework, but in addition, each new C / MPA will develop a financial strategy to reduce any emerging financial gaps in relation to the management of the C / MPAs.

Financial sustainability will be further on strengthened through the twinning of the project with other ongoing nature conservation projects in the country and current government efforts to meet the national biodiversity targets through the support for the PA system development and strengthening. There are two key elements of securing financial sustainability within the project and of the overall national C / MPAs network: First, to secure the commitment of the Government to increase its annual resource allocation to the management of its C / MPA subsystem, and to identify alternative sources of co-financing for project activities, and second, to identify, strengthen and promote alternative, self-generated sources and mechanisms of PA funding. There is also a newly adopted approach of involving a broader set of State stakeholders in managing the C / MPAs, such as forestry authorities and land-use institutes. These expert government agencies have regular extra-budgetary revenues, a part of which will be utilized for an improved management of the C / MPA network. At a local C / MPA level, the project will provide resources to more explicitly identify the medium-term expenditure requirements and program the roll-out of the appropriate financing mechanisms to generate the income streams needed to meet these anticipated costs. Those will encompass the entire range of C / MPA financing mechanisms: market-based charges for C / MPA goods and services (resource use fees, bioprospecting fees, payments for ecosystem services, carbon offsets, tourism charges, leases and concessions), generating funding to encourage conservation activities and target main drivers of biodiversity loss (cost-sharing, investment, credit and enterprise funds, environmental funds, local benefit-sharing/revenue sharing, fiscal instruments, promotion of alternative sources of income for population that relies on natural resources) and attracting and administering external flows (private donations, volunteer actions, grants and government and donor budgets, such as the EU pre-accession funds).

Its sustainability will also be ensured through a variety of ongoing activities established with partners like RAC/SMPA, MedPAN and GESAMP that have a strong, active and continuing presence in Montenegro in regards to the issues of marine ecosystems and biodiversity conservation. They fund their activities through a variety of sources, including the GEF, EU, etc. they would be able to ensure, through their continuous work, that the outcomes of this projects are maintained and enforced. Furthermore, the project will cooperate with country coordination office established through the Adriatic project in order to ensure well-coordinated marine spatial planning and more country ownership.

Potential for scaling up and replication

The project in its core is being developed in order to provide possibilities for replication and scaling up. As the project establishes the first ever marine PA that should continue in further expansion and replication in the subsystem of C / MPAs, along with effective management framework and national planning framework and 10-Year Business Plan. Effective planning and management frameworks will facilitate application of optimal management model for C / MPAs and effective measures to further extending in the subsystem of C / MPAs. The relevant officials and management staff will undergo training and capacity building exercises, which will provide effective management in three new C / M PAs and increase the awareness and knowledge that could be applied in future activities. The training will also include a component on developing integrated monitoring systems, which will be developed in a standardized way to ensure replication to other PAs.

The project also bears good potential for scaling up and replication as it responds to the often voiced need for harmonized nature conservation and strengthening capacities for including environmental concerns into policy planning, resource management and service delivery. Replication will be achieved through the direct replication of selected project elements and practices and methods, as well as the scaling up of experiences and best practices applied on the ground.

A.2. Child Project? **If this is a child project under a program, describe how the components contribute to the overall program impact.**

N/a

A.3. Stakeholders. Will project design include the participation of relevant stakeholders from civil society organizations (yes ☒ /no☐) and indigenous peoples (yes ☒ /no☐)? If yes, elaborate on how the key stakeholders engagement is incorporated in the preparation and implementation of the project.

There is a wide range of stakeholders in the country that are involved in various aspects of biodiversity conservation and protected areas management.

- The national government institutions
- Universities and institutes
- Civil society organizations (CSOs)
- Multi-lateral and bilateral donors and international organizations
- Other stakeholders: public and private companies
- Local communities

The coordination role on the state level belongs to the Ministry of Sustainable Development and Tourism of Montenegro, while other relevant state stakeholders include Ministry of Agriculture and Rural Development and Ministry of Transport and Maritime Affairs, that are supposed to take part in the project Steering Committee, together with Public Enterprise for Coastal Zone Management "Morsko Dobro" and Environment Protection Agency. As the project design predicts environmental and economic benefits arising through physical investment, development of new strategies, capacity building and training and activities to assist communities in and around PAs in developing sustainable and alternative revenue generation, all stakeholders agreed to be actively involved in the project through every stage.

With the establishment of the new C/ MPAs and stakeholder capacity enhancement activities, the project would generate significant mutual economic and environmental benefits for Montenegro by creating opportunity to generate (green) jobs, particularly from tourism and recreation and sustainable PAs management; securing conservation of biodiversity; and conserving and improving management of significant biodiversity and landscape values of proposed C / M PAs. Commitment to PAs on a policy and legislative level of the governments of Montenegro is mainly envisaged by the Nature Protection Law (2008, 2013). Law on Marine Fisheries and Aquaculture (2003, 2011), Law on Public Maritime Domain (1992, proposal of the new Law is in the process of adoption), Law on Spatial Planning and Construction of Facilities (2013), Law on Environment (2008), Law on Sea (2007), EIA and SEA laws also have significant relevance in regards to commitments to protection of marine and coastal ecosystems. A commitment of the Government of Montenegro for nature protection and the project was confirmed with the positive opinions and approvals provided also for the document "*National Biodiversity Strategy and Action Plan of Montenegro (2016-2020)*".

From the first day of the project preparation activities, all stakeholders were communicated with and actively consulted and engaged in the project design, with a special focus on enhancing communication, coordination and cooperation among all of them. Private sector organizations, NGOs and research institutions working in the area of nature conservation, will be involved in the project through providing the outputs related to biodiversity management and networking, as well as contributing to fundraising. It has been also duly noted the local level governments and local communities represent an important stakeholder and final beneficiary, and thus will be further involved in the project through consultation processes. Main stakeholders of the project are actively included and informed about every stage of the project preparation development phase.

The following table provides an overview of the main stakeholders of the project, their main responsibilities and activities they are performing.

Table 15. Identified Main Stakeholders for Biodiversity Conservation and PA Management in Montenegro

Main stakeholders	Scope of work on biodiversity conservation and PAs management	Engagement during Project implementation
Governmental institutions/ agencies		
Ministry of Sustainable Development and Tourism	Administrative and governance responsibilities in the following areas: environmental protection including biodiversity and nature protection, spatial planning, construction, tourism, and sustainable development and integrated coastal zone management. Ministry is responsible for integrated coastal zone management, which mainly focus on implementation of the Barcelona Convention and its Protocols, including the Protocol concerning Specially Protected Areas and Biological Diversity and the Integrated Coastal Zone Management Protocol, as well as the implementation of recently adopted National Strategy on ICZM.	Chairing of the Project Steering Committee Decision-making regarding project implementation Supervision of the project realization on daily basis
Ministry of Agriculture and Rural Development	Administrative and governance responsibilities s in following fields: freshwater, marine fisheries and mariculture, system solutions for the provision and use of water, water land and water-springs for water supply, system solutions for the provision and use of water, water land and water-springs for water supply, water pollution protection, regulation of water and watercourses and protection from the harmful effects of water.	Participation in Project Steering Committee
Ministry of Transport and Maritime Affairs	Administrative and governance responsibilities in following fields: maritime policy, development of ports of national importance and the safety and security of maritime traffic, setting up of indicators, prevention and undertaking emergency measures in case of sea pollution from vessels; Indicators of prevention and taking emergency measures in case of sea pollution from vessels.	Participation in Project Steering Committee
Environment Protection Agency	Executes expert based administrative procedures, collect and manage data on the state of environment, including nature protection and preparation of the baseline studies for establishing and management of the protected areas.	Participation in Project Steering Committee Research, fieldwork and investigations Preparation of the studies on protection for C / MPAs
Public Enterprise for Coastal Zone Management “Morsko Dobro”	This enterprise manages coastal zone, as the narrow strip of the coastal area, perform its protection, regulation and improvement, and concludes agreements on its use.	Participation in Project Steering Committee Participation in the process of defining optimal management structure Establishing management structures for the new C / MPAs

Main stakeholders	Scope of work on biodiversity conservation and PAs management	Engagement during Project implementation
National Parks of Montenegro	It performs management, protection, development and improvement of national parks. It ensures the implementation of a management plan and annual management program; implement protection measures in accordance with the regime of protection, etc. Activity of the enterprise is established by Statute and is performed in the following units: National Park "Biogradska gora," National Park "Durmitor", National Park "Lovcen", National park "Skadarsko jezero " and National Park "Prokletije"	Participation in the process of defining optimal management structure as the only currently functional PA management system
Municipalities of Kotor, Budva, Bar and Ulcinj	Participate in the integrated management of coastal zone through its organizational units responsible for environmental protection, economic development, urban planning and constructions, public utilities (water supply, waste, sewerage etc.) etc.	Participation in the process of defining optimal management structure Establishing management structures for new C / MPAs
Port authorities	Perform activities related to ports of national importance, ensuring fulfillment of the requirements established by international and national regulations governing the prevention of environmental pollution from ships, protection of the marine environment and coastal areas and civil liability for damage caused by pollution.	Participation in the process of defining optimal management structure
Maritime Safety Administration	Performs tasks related to safety of navigation in the coastal sea of Montenegro in connection with the maintenance of navigable waterways; determining the seaworthiness of ships and other vessels floating structures; performance of technical expertise in maritime accidents occurred; organizing and conducting search and rescue at sea; prevention of pollution from ships and floating structures	Participation in the process of defining optimal management structure
Directorate for Inspection Supervision	Inspection supervises the implementation of environmental and other regulations, performs controls in the field of environmental protection, including the nature protection.	Participation in the process of defining optimal management structure
Local communities		
Local communities in Kotor, Budva, Bar and Ulcinj	Direct beneficiaries to the project.	Participate in consultative processes
Private sector		
Local businesses and businesses operating in the area and the vicinity of the three new C / MPAs	Direct beneficiaries to the project.	Participate in consultative processes
Research institutes/universities		

Main stakeholders	Scope of work on biodiversity conservation and PAs management	Engagement during Project implementation
Institute for Marine Biology Kotor, University of Montenegro	Institute is the unit of the University responsible for the scientific and technical research in the field of marine biology and fisheries.	Research, fieldwork and investigations Participate in consultative processes
Civil Society Organizations		
Green Home, Podgorica	The aim of the organization is environmental preservation and protection, biodiversity conservation and implementation of the sustainable development principles. The programme for the environmental protection aims to promote, educate and support local and regional initiatives in nature protection and conservation	Participate in consultative processes
Centre for Protection and Research of Birds of Montenegro	The Organization aims to initiate, encourage and support scientific and professional research of ornitofauna and other biodiversity groups in the area of Montenegro, promote and present to national and international public the richness of biodiversity, to educate and raise awareness of people about their knowledge of birds and other members of biodiversity, to indicates to the needs and means of protection of birds and their habitats, as well as other members of biodiversity	Research, fieldwork and investigations Participate in consultative processes
Greens of Montenegro	The work this non-governmental organization is divided in two programmes: Programme for Environmental Protection and Programme for Energy. Programme for the environmental protection aims promoting, educating and supporting local and regional initiatives in nature protection and conservation. Programme for Energy aims promoting , educating and supporting local and regional initiatives on energy efficiency and use of alternative energy sources	Participate in consultative processes
MedCEM[85]	Main aim is to raise awareness in treatment ecosystems of Adriatic Sea, Coastal region and Skadar Lake. Actions of MedCEM where managing, implementing knowledge and providing technical support in field of nature protection, as well as collecting data, analyse and presenting information related to ecology and sustainable development. MedCEM is founded in Bar, coastal municipality with jurisdiction over largest part of National Park Skadar Lake and central part of South-East Adriatic Coast. Municipality of Bar is leader in region as trade and cultural centre, the biggest coastal town and the biggest Port in MNE	Participate in consultative processes
International organizations and programs		

[85] Mediterranean Centre for Environmental Monitoring

Main stakeholders	Scope of work on biodiversity conservation and PAs management	Engagement during Project implementation
UN Environment	UN Environment's work encompasses: (i) assessing global, regional and national environmental conditions and trends, (ii) developing international and national environmental instruments, (iii) strengthening institutions for the wise management of the environment	Provide execution of the project activities Participate in all consultative processes
UNEP/MAP RAC/SPA	The Barcelona Convention and its seven Protocols adopted in the framework of the Mediterranean Action Plan are the major regional legally binding agreement providing a framework for environmental policy development in the Mediterranean. To assist Contracting Parties to implement the Convention and its Protocols a Coordinating Unit and 6 Regional Activities Centres (RACs or so-called components) were established. The Component for Specially Protected Areas (SPA/RAC) based in Tunis is the Centre in charge of coordinating the implementation of the Protocol Concerning Mediterranean Specially Protected Areas (SPA/BD Protocol).	Participation in consultative processes as well as in the process of defining optimal management structure Provide synergy of the project with past and ongoing activities Engagement in project implementation
GFCM	The General Fisheries Commission for the Mediterranean (GFCM) is one of the Regional Fisheries Management Organizations under the framework of the Food and Agriculture Organisation, which, deals with the marine environment through its Fisheries and Aquaculture Department.	Participate in consultative processes
GESAMP	The Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) is an advisory body, established in 1969, that advises the UN system on the scientific aspects of marine environmental protection. At present GESAMP is jointly sponsored by nine UN organizations with responsibilities relating to the marine environment, and they utilize GESAMP as a mechanism for coordination and collaboration among them. GESAMP functions are to conduct and support marine environmental assessments, to undertake in-depth studies, analyses, and reviews of specific topics, and to identify emerging issues regarding the state of the marine environment. GESAMP itself today consists of 16 experts, drawn from a wide range of relevant disciplines, who act in an independent and individual capacity. Studies and assessments are usually carried out by dedicated working groups, most of whose members are not sitting members of GESAMP but part of the broader GESAMP network.	Participate in consultative processes
UNDP	Promoting sustainable development, which is economically viable, socially inclusive and environmentally friendly. UNDP works to promote sustainable economic development by strengthening environmental protection policies, developing sustainable local businesses, and promoting clean energy.	Participate in consultative processes

Main stakeholders	Scope of work on biodiversity conservation and PAs management	Engagement during Project implementation
IUCN	IUCN is the global authority on the status of the natural world and the measures needed to safeguard it. IUCN provides governments and institutions at all levels with the impetus to achieve universal goals, including on biodiversity, climate change and sustainable development, which IUCN was instrumental in defining.	Participate in consultative processes Expert assistance on PA categorization and management
WWF	Focussed on two broad areas: Biodiversity and footprint. The first is to ensure that the earth's web of life-biodiversity- stays healthy and vibrant for generations to come. Strategically is focused on conserving critical places and critical species that are particularly important for the conservation of our earth's rich biodiversity.	Participate in consultative processes
REC Montenegro	REC Montenegro operates as an international organisation, following the bilateral agreement signed by the REC and the Government of Montenegro in April 2004. In accordance with the REC's mission, REC Montenegro assists in solving environmental problems through the promotion of cooperation among the country's main stakeholders (governments at all levels, businesses, non-governmental organisations and other environmental stakeholders), and through support to public participation in environmental decision making and to the free exchange of information	Participate in consultative processes

Capacity development

During the project preparation, a capacity development scorecard was undertaken to evaluate the most relevant actors that will be implementing the project, namely, the Ministry of Sustainable Development and Tourism, Environment Protection Agency, Public Enterprise for Coastal Zone Management "Morsko Dobro". The evaluation was done in order to determine the capacities of these actors to effectively and sustainable manage the C / MPAs subsystem and individual C / MPAs.

The scorecard showed 35.5% capacities obtained, meaning the capacities of the main actors need to be improved, as it was envisaged in the project logframe through training of both management staff and relevant authorities and decision makers. The scorecard is attached to this document as Annex Q.

Impact on local population

Majority of local population in the coastal area of Montenegro work with tourism and fishing, which is their main source of income. Restriction to the use of natural resources as in case of protecting areas that hold importance for tourism and fishing may cause economic displacement and social detriment to the local population (negating access to resources for which they have recognized or traditional rights). By restricting local population from performing activities that are both of economic and social value, the project may have negative impact in this regard and a thorough assessment of socio-economic impacts on local population needs to be made in consultations with the local population upon initiation of the project. From the very beginning, local communities, local businesses and other interested parties need to be informed and consulted on the project implementation in order to mitigate any potential conflict and loss of income or businesses. If deemed necessary upon the assessment of the socio-economic impacts, the project will develop a livelihood restoration plan for local population to be executed and implemented by the local authorities in cooperation with relevant state authorities.

A.4. Gender Equality and Women's Empowerment. Are gender equality and women's empowerment taken into account (yes ☒ /no☐)? If yes, elaborate how it will be mainstreamed into project implementation and monitoring, taking into account the differences, needs, roles and priorities of women and men.

This proposed project is consistent with the GEF Policy on Gender Mainstreaming (PL/SD/02. May 1, 2012). It is also in line with the UN CBD recognizing the important role of women in achieving the objectives of the Convention: "the vital role that women play in the conservation and sustainable use of biological diversity and affirm the need for the full participation of women at all levels of policy making and implementation for biological diversity conservation". Gender relations between women and men play a key role in the access to environmental resources, control of the resources, and the goods and services they provide. The same is true for representation of vulnerable groups and ethnic or religious minorities. In order to ensure that there are no disproportionate negative impacts to women or other disadvantaged or vulnerable groups, appropriate involvement of all social groups will be ensured during project's implementation.

In 2011, women and girls represented 50.6 % of the total Montenegrin population. Male and female labor force participation is low compared to other countries in the region, while the gender gap in participation is relatively large. 52% of women and 64% of men aged 15-64 participate in the labor force in Montenegro. Much of the inactivity gap is explained by large gender disparities experienced by rural people. Economic inactivity is especially high among women with primary schooling or less, ethnic minorities, and older women. Overall, women spend more time caring for their families and children, which contributes to reducing their opportunities to participate in the labor market in the absence of alternative childcare options. There is little difference between male and female unemployment rates in Montenegro (21% and 19% respectively), but high rates of unemployment occur among younger workers (of individuals 15-24 years, 51% of females and 43% of males). Both male and female workers experience high rates of long-term unemployment. Among those who work, a clear wage gap exists, with women earning 16% less than men. This gap is not explained by workers' characteristics (e.g., education and experience) but rather by unobserved factors, of which discrimination may play a role. Finally, women self-employ less and have lower rates of firm ownership and management.

In 2011, only 31% of legislators, senior officials, and managers and 11% of representatives in Parliament were women. Only 2 of the 17 ministers and 26% of the directors in the Government of Montenegro were female. Men also hold more leadership positions in the media and there are perceptions that the media reinforces gender stereotypes. Females are over-represented in the group of adults having low educational attainment (76% of those with less than a primary education is female). Large educational attainment disparities still exist among non-Montenegrin immigrants and females in rural areas. However, tertiary enrolment rates have more than doubled over the past decade and are moving toward the higher EU averages. Gender gaps in enrolment point the opposite direction, as males have a 10% point lower tertiary enrolment rate than females. Working-age males study mathematics-, engineering-, and science-related fields at higher rates than females, who study fields related to services, social sciences, business, and law more often. The relationship between these differences and gender gaps in other areas of importance (i.e. political leadership and economic entrepreneurship) are largely unknown and should be a priority of future research.

Most recent policies include the development of the Gender Action Plan (2013-2017), which states the activities necessary to be undertaken to ensure gender equality. However, institutional gender mechanisms - Department for Gender Equality within the Ministry of Human and Minority Rights and Parliamentary Board for Gender Equality - are severely under-mandated, under-staffed and under-budgeted. Due to persisting gender-based disadvantages, women are vulnerable and lack political and economic empowerment, including protection against family violence.

Based on the current situation, this project may have different impacts on men and women, mainly due to the fact that women are more employed in services, such as tourism and recreation, which may have more negative impact of women's livelihoods. On the other side, more fishermen are men, which will contribute the project to have several different effects on men and women.

In order to ensure fair and equal treatment to both women and men, but also vulnerable and minority groups within the project, a Communication Strategy developed at the inception phase. The Strategy will identify all relevant vulnerable groups and ethnic and religious minorities, taking gender equality into consideration and will detail their involvement throughout the project at various levels of implementation. Representatives of vulnerable groups and ethnic minorities will be invited to participate to every national consultation, workshop and training, and the project implementation team will be gender balanced. Key indicators for gender equality considerations and involvement of ethnic/religious minorities and vulnerable groups will be their active participation during development of project, including percentage of women present at national stakeholders meetings (especially local meetings that will not take place in the capital Podgorica), number of ethnic/religious minorities involved in drafting of government documents, public hearings, trainings etc. All documents (national framework, financial strategies and management plans, studies on nature protection, etc.) developed

in all components of the project will consider gender mainstreaming and inclusion and representation of all ethnic and religious groups found in the region on implementation.

The project will additionally include special component on gender and youth as part of the capacity building and awareness raising activities. As a part of the project, trainings will be organized in local communities in the three new PAs Stari Ulcinj, Katic and Platamuni with the purpose of experience and knowledge sharing on the topic of living and working in PAs from the different perspectives, including age (young people) and gender. The trainings will try to collect information about the main opportunities and challenges of living in and near to protected areas, sustainable use of natural resources and local traditions. The information will be used to build on the materials for capacity building of the relevant government officials and PA management staff.

The likely mechanisms for gender mainstreaming in the project based on UN Environment Gender Policy will be:

1) ensuring gender balance when representing different sectors and conducting activities of the project;

2) optimizing entrepreneurial and decision-making opportunities for women through promoting gender parity in recruitment;

3) assess impacts of the project for men and what for women; trainings to scale up involvement of women in the PA system planning and management.

Specific outputs of the project aimed at gender equality and empowerment of women and other vulnerable groups refer to outputs 1.2.1, 1.2.2, 1.2.3, 1.2.5, 1.2.6, 1.3.2, 1.4.1, 1.4.2, 2.1.1, 2.1.2, 2.1.4.

The project shall achieve the fulfilment of:

- Knowledge and understanding of the issue and validation of women's contributions to sustainable development
- At the institutional level, adequate political support will be combined with concrete actions
- Assurance of women's rights, and that they benefit from environmental goods and services
- Full participation of women at all levels, particularly in decision-making
- Improvement of the socio-economic position of women
- Women's empowerment
- Identifying the impact of the macro context on women and their environment.

Project activities will endeavour to ensure preservation of women's knowledge and preventing overuse of the local and traditional knowledge. With the assistance from the stakeholders, the systematic documentation of traditional health and biodiversity knowledge and the bottom-up development of locally owned - traditional environmental knowledge shall be supported, taking into consideration gender equity in natural resource management, research, planning and decision-making at all levels. In this context also considered shall be the active participation of different social classes while ensuring that benefits from interventions accrue to both men and women. All relevant information on women's knowledge and survival strategies in rural and local community areas and their expertise in respective fields will be documented. In the cooperation with the project CSOs, expertise on gender and environment will be improved and a network of research institutions and individuals that spans many disciplines related to women empowerment in Montenegro will be mapped.

Project activities and stakeholders shall empower and assist women in their role as local natural resource managers and identify strategies to help rural women achieve sustainable livelihoods, while allocating adequate technical and financial resources to support women directly in natural resource management and the control of environmental degradation. Enhance women's access to education, with the relevant CSOs, project will support, strengthen and involve women's organizations and networks working on environmental issues with an aim of sharing the awareness of both importance of nature preservation and the importance of women in the whole cycle.

A.5. Benefits. Describe the socioeconomic benefits to be delivered by the project at the national and local levels. Do any of these benefits support the achievement of global environment benefits (GEF Trust Fund) and/or adaptation to climate change?

National level

On national level there are few most important socioeconomic benefits of the project, including

- Increased institutional capacities and the capacities of the management staff, engagement of additional staff to cover new C / MPAs

- Establishment of network of C / MPA will lead to more systematic generation of capacities, information and provide opportunities for joining larger networks (regional, global), which could bring forth additional exchange of knowledge
- Educational and research opportunities (data base with information from the assessment of ecosystem values undertaken as part of Component 1)

Local level

On the local level, the following are the most relevant socioeconomic benefits of the project:

- Protection of valuable assets of the C / MPAs – increased values of ecosystem services for local population
- Opportunities for recreation in the newly established C / MPAs
- Aesthetic values
- Cultural and heritage conservation in the new C / MPAs

These local and national benefits are closely connected to the GEF's Global Environmental Benefits as well, as they are implications of both conservation of (globally) significant biodiversity and sustainable use of the components of (globally) significant biodiversity.

Project design assumes environmental and economic benefits arising through physical investment, development of new strategies, capacity building, awareness raising and training. The project would also support activities to assist communities in and around PAs in understanding and developing sustainable and alternative revenue generation. Through the expansion of PAs and stakeholder capacity enhancement activities, the project would generate significant mutual economic and environmental benefits by: (i) creating the opportunity for generating jobs from better utilization of ecosystem values, particularly in relation to tourism and recreation; (ii) securing conservation of biodiversity in internationally-important ecosystems; and (iii) conservation and improved management of globally-significant endemic biodiversity and landscape values of critical ecosystems.

*A.*6. Risks. Indicate risks, including climate change, potential social and environmental future risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks:

The risks for project implementation are identified and assessed, along with mitigation measures for each identified risk.

Table 16. Identified risks and mitigation measures

No.	Risks	Level of Impact	Mitigation Measures
1.	**Lack of community support for local-level interventions** Community support is critical for proclamation of the C / MPAs and efficient C / MPA management	Medium - High	The project will involve all stakeholder groups, specifically through the communication strategy for raising awareness, where the project will engage local communities in knowledge and sharing activities from the beginning of the process, regularly and steadily throughout the project. The project will ensure the support of the local communities is achieved by raising awareness of the local communities on the benefits of protected areas in their specific cases, where the environment has been under pressure and the ecosystem benefits duly harvested from the area may significantly diminish or even fully disappear.
2.	**Negative impact on livelihoods of local communities.**	Medium - High	The project will assess the potential for negative impacts on local communities that depend on fishing and tourism as a main source of income. In case such a possibility arises, the project will design a livelihood restoration plan to be

No.	Risks	Level of Impact	Mitigation Measures
	The proclamation of the new C / MPAs may restrict access to source of income for local communities (fishing, tourism activities, etc.)		submitted to the government for adoption and enactment.
3.	**National decision-makers lack responsiveness to designation of new C / MPAs and revision of the current PAs**	High	As part of the project, the decision makers' awareness on benefits of sustainable management of C / MPAs will be raised through trainings and capacity building of the relevant decision-makers. The trains and capacity building will focus on emphasizing the values of C / MPAs and the positive outcomes of such in a variety of domains, including tourism, economics, etc. The project communication strategy also envisages holding bilateral meetings when deemed necessary.
4.	**Lack of institutional capacities to mainstream integrated PA management into relevant sectoral policies**	Medium	The government representatives will undergo high-skilled training in order to raise their capacities on sustainable management of C / MPAs, which will lead to understanding the values of C / MPAs for other economic and non-economic sector, and not only biodiversity conservation.
5.	**Lack of sufficient political support and willingness to enable expansion of PA coverage, especially C / M PAs**	Medium	The project will develop a national planning framework, which will facilitate the inclusion of necessary changes to the relevant policies and regulations. Furthermore, the government representatives will undergo trainings in order to raise their capacities on sustainable management of C / MPAs and the benefits of such.
6.	**National planning procedures not open for amendments and/ or revisions**	High	The project will develop a national planning framework to facilitate inclusion of necessary changes in the legislation.
7.	**Lack of local businesses and fishery community support to establish and effective manage new C / M PAs** Local business and fishery community may witness short-term negative changes in the daily operations, especially from financial aspects, as they may have been exploiting the areas proposed for protection.	High	The project will involve all stakeholder groups, specifically through the communication strategy for raising awareness, where the project will engage local communities in knowledge and sharing of experiences. Such proactive consultation and communication activities will start from the beginning of the process, regularly and steadily throughout the project. The project will ensure the support of the local communities is achieved by raising awareness of the local communities on the benefits of protected areas in their specific cases, where the environment has been under pressure and the ecosystem benefits duly harvested from the area may significantly diminish or even fully disappear. The project will assess the potential for negative impacts on local communities that depend on fishing and tourism as a main source of income.

No.	Risks	Level of Impact	Mitigation Measures
			In case such a possibility arises, the project will design a livelihood restoration plan to be submitted to the government for adoption and enactment. The project will also build upon the activities of EcAp to tackle this issue. Furthermore, UNEP/MAP office has reached an agreement with fisheries sector in all Mediterranean countries, including Montenegro.
8.	**Long consultation process** Many stakeholders with different (sometimes opposing) attitudes towards proclamation of PA	Medium	All relevant stakeholders will be included in the project from the very beginning in order to ensure all relevant aspects of the project are communicated and relevant knowledge on benefits of C / MPAs is shared with the help of activities proposed in the communication strategy.

A.7. Cost Effectiveness. Explain how cost-effectiveness is reflected in the project design:

The suggested mix of policies and interventions is efficient and cost effective because it will be built on the experiences and efforts already undertaken for the establishment and management of protected areas in Montenegro. The selected sites are already the marine and coastal areas that the Government prioritized to protect. Establishing coastal and marine protected areas provides a way to restore, safeguard and enhance valuable fish stocks and fragile habitats while providing long-term options for sustainable economic development. Therefore, the projects' over-all intervention strategy is cost effective. Cost effectiveness will be further enhanced by reflecting this into the management of the project. Building capacities and systems for cost effective management will also ensure that future management practices will be designed and applied efficiently and effectively. The tracking tool will help to review improved effectiveness of establishment and management of marine and coastal protected areas in Montenegro.

A.8. Coordination. Outline the coordination with other relevant GEF-financed projects and other initiatives [not mentioned in 1]

This GEF project will build on the efforts made through other projects and initiatives and seek coordination with the ongoing relevant projects.

- Establishment of Natura 2000 network in Montenegro

The outcomes of this GEF project will build upon the results of the Natura project, including the identification of list of sites of community importance in compliance with Art. 4 paragraph 1 & 2 of Habitat Directive. Once a site of Community importance has been adopted in accordance with the procedure laid down in paragraph 2 (Art. 4 of Habitat Directive), the Member State concerned shall designate that site as a special area of conservation as soon as possible and within six years at most, establishing priorities in the light of the importance of the sites for the maintenance or restoration, at a favourable conservation status, of a natural habitat type in Annex I or a species in Annex II of Habitat Directive and for the coherence of Natura 2000, and in the light of the threats of degradation or destruction to which those sites are exposed.

- "Regional Project for the Development of a Mediterranean Marine and Coastal Protected Areas (MPAs) Network through the boosting of MPAs Creation and Management" implemented by UNEP/MAP and SPA/RAC, where Montenegro was one of the 12 countries

The outcomes of the project that could feed into this project include development of a website that serves as an interactive data base for presenting status and ongoing activities related to the environmental situation in Montenegro's coastal and marine PAs. This project will use the developed tools (website) to disseminate the project outcomes, including the results of the assessment from Component 1. The website may be also used to facilitate the awareness raising activities within the communication strategy.

Additionally, the SPA/RAC project has developed Legal and Institutional Framework Assessment for Conservation of Coastal and Marine Biodiversity and the Establishment of Marine PAs in cooperation with IUCN. The document serves as a basis for building on legal, policy and institutional reforms to strengthen the creation processes and the management of marine PAs.

- Bilateral support from Italian Ministry for Environment, Land and Sea in the activities implemented by national authorities in the scope of regular monitoring of the status of marine and coastal biodiversity

This project will be complementary to the bilateral support from Italy in the following activities:

- It will build on harmonization effort of national legislation with EU regulations in regards to environmental protection.
- It will support institutional development and capacities building in relation to PA management
- It will build on efforts to monitor environmental quality through development of the monitoring system of biodiversity in PAs
- It will support environmental management in field of nature protection
- It will build on efforts of promoting sustainable tourism and sustainable management of PAs
- It will build on activities within the framework of the Mediterranean Action Plan (MAP) and the initiatives for protection of marine and coastal areas, including the partnership ADRICOSM

- "Implementation of Ecosystem Approach in the Adriatic Sea through Marine Spatial Planning" developed by UNEP/MAP (Adriatic project)

The outcomes of the project focus on integration of Marine Spatial Planning with Ecosystem Approach through increasing management capacities of national PAs network on which this GEF project will build on. The specific activities Adriatic project has resulted in that this project will pick up on include:

- Science-based consensus reached among sub-regional countries on Good Environmental Status (GES) of the Adriatic Sea based on the Mediterranean Ecological Objectives adopted by UNEP/MAP
- Sub-regional programme on integrated observation and monitoring system is agreed among Adriatic countries, including regionally agreed common indicators
- Capacity building for improved sub-regional environmental management through implementation of demonstration Marine Spatial Plans
- National and regional cooperation towards maintaining good environmental status of the Adriatic Sea achieved

This proposed GEF project will seek to synergize with the Adriatic project through the following:

- securing strong linkages to the country coordination offices[86] ensuring well-coordinated marine spatial planning/more country ownership and
- contributing to align with work towards creating an updated sub-regional data base on important marine areas.

- Project for the Mediterranean implementation of the Ecosystem Approach, in coherence with the EU MSFD (EcAp-MEDII) (2016-ongoing)

With the ultimate objective of achieving the GES of the Mediterranean Sea, the project seeks to support the Southern Mediterranean Contracting Parties to the Barcelona Convention to implement the EcAp Roadmap agreed in Decision IG. 21/3, through assisting them in establishing new monitoring programmes in line with EcAp. This will enable for the first time a quantitative monitoring of the status of the Mediterranean Sea and coast on a regional basis, covering biodiversity and non-indigenous species, coast and hydrography, and pollution and marine litter monitoring in an interlinked manner.

In addition, the project addresses some specific challenges of the EcAp Roadmap implementation, strengthening science-policy interface, addressing sub-regional implementation needs, and responding to data and information challenges in the region.

[86] The country coordination offices will incorporate representatives from all relevant ministries, serving as an interministerial committee

The project covers the period of six semesters from October 2015-September 2018, with a budget of 2,675,000 EUR. It builds on the achievements of the EcAp-MED 2012-2015 EU-funded project and aims for potential co-financing both from the Mediterranean Trust Fund and other resources.

The focus of the project on country level is only related to Southern Mediterranean countries; as such it does not include Montenegro. However, some of its activities, including the development of common indicator monitoring fact sheets, are relevant also for Montenegro, both in relation to the Adriatic Project's implementation, above and to its commitments to implement the Ecosystem Approach, in line with Decision IG. 22/7.

Montenegro has also asked to analyse the replication potential of this project for the Balkans region in the project's Steering Committee and thus the EcAp-MEDII Project Output 5, the EcAp-MEDII Funding Strategy (currently under development) specifically also addressing replication potentials and as such, EcAp/IMAP implementation funding possibilities for Montenegro.

- Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security (2017-ongoing)

The project, encompassing 8 countries, including Montenegro, aims to accelerate the implementation of agreed upon priority actions to reduce the major transboundary environmental stresses affecting the Mediterranean Sea and its coastal areas while strengthening climate resilience and water security, and improving the health and livelihoods of coastal populations.

The structure of the MedProgramme fully reflects the priorities adopted by the Contracting Parties to the Barcelona Convention in the UNEP/MAP 2016-2021 Mid Terms Strategy as well as other instruments approved by the countries, such as the Mediterranean Strategy for Sustainable Development 2016- 2025 (MSSD). The MedProgramme will target coastal nutrient pollution hotspots, harmful chemical and wastes, critical coastal habitats and freshwater resources, climate resilience, marine protected areas, and monitoring of progress to impacts and coordination among Child Projects. It will be developed through four Components and seven Child Projects.

- MedPartnership (Strategic Partnership for the Mediterranean Sea Large Marine Ecosystem)

The UNEP/MAP GEF Strategic Partnership for the Mediterranean Large Marine Ecosystem (MedPartnership) is a collective effort of leading organizations (regional, international, non-governmental, etc.) and countries sharing the Mediterranean Sea towards the protection of the marine and coastal environment of the Mediterranean.

The MedPartnership is being led by UNEP/MAP and the World Bank and is financially supported by the Global Environment Facility (GEF), and other donors, including the EU and all participating countries.

This project seeks to build on priorities identified in the NAPs, the Stockholm Convention NIPs, and on existing initiatives in some Mediterranean states, in order to provide a first, harmonized initiative on PCBs that meets the obligations of the Stockholm and Barcelona Conventions and is compatible with the requirements under the Basel Convention to which all the Mediterranean states are Party.

The aim of the project is to introduce environmentally sound management (ESM) to all stages of the "life-cycle" of electrical equipment containing or being contaminated with PCBs and its activities include: Review and reforming institutional and legal frameworks, implementation of demonstration projects, technical capacity buildings and awareness rising.

- Tangier Declaration

At the end of 2016, Mediterranean MPA Forum was in Tangiers, Morocco, where the Forum participants decided to enforce a Tangier Declaration, pledging among other, to strengthen efforts to effectively conserve at least 10% of the Mediterranean Sea by 2020 for the coastal areas and then for the open sea and the need to expand coverage and implementation of no-go, no-take and no-fishing zones within current or future MPAs at 2% of the surface of the Mediterranean sea, especially in the key functional areas.

- Emerald Pilot Project in Serbia and Montenegro (2006)

The information collected and assessed during the Emerald project will serve as background data for establishment of the new marine and coastal PAs.

A.9. Institutional Arrangement. Describe the institutional arrangement for project implementation:

UN Environment

The project will not create any new institutions for execution. UN Environment Europe Office will be responsible for the procurement of consultants and non-consulting services, financial management of the GEF grant, and preparation and dissemination of audits, progress and financial reports. The Regional office will also ensure the project is linked well with regional and global initiatives.

The national Project Coordinator will assist in financial management, however 90 % of his/her time will be devoted to technical works.

UN Environment's Ecosystem Division represents the Implementing Agency, while the UN Environment Europe Office is the Executing Agency of the Project.

UN Environment Europe Office has so far successfully worked with the Government of Montenegro on the development of the National Action Programme to Combat Land Degradation in 2013-2014, which proved to be a highly recognized intervention in the country in regards to its international environmental obligations towards the UN Convention to Combat Land Degradation, as a part of the GEF Enabling Activities. UN Environment for Europe –Office in Vienna is also assisting the preparation and implementation of the Review and update of the national implementation plan for the Stockholm Convention on Persistent Organic Pollutants (POPs) in Montenegro under the global GEF umbrella project on the Updating of National Implementation Plans for POPs. Apart from the activities in the country, UN Environment hosts the Secretariat of the Mediterranean Action Plan for Barcelona Convention (UN Environment MAP), which would therefore ensure synergies and linkages with other projects and initiative regionally, but also make sure the sustainability of the project is ensured.

The country ownership will be ensured through having the Ministry of Sustainable Development and Tourism chairing the Project Steering Committee and hosting the Project Implementation Unit. The Ministry of Sustainable Development and Tourism on behalf of the Government of Montenegro will provide political and institutional supervision for the overall project activities. The Ministry of Sustainable Development and Tourism, as the institution responsible for the CBD implementation on the national level, will appoint a Project Director who serves as the liaison person between UN Environment and the Ministry and ensures proper coordination of the project within national institutions. In order to enhance country ownership, we added two national posts: National project coordinator, and National project assistant. These two key staff will be based in Montenegro at the premises of the Ministry. The Ministry will host these two national posts. (Please see Annex H Project Implementation Arrangement, and the Terms of References in Annex E.)

A Project Steering Committee will be formed and this Committee will provide overall guidance and strategic direction and oversight to project management and will approve all final outputs and deliverables of the project. The PSC will include representatives of relevant Governmental institutions of Montenegro.

Project collaborators include partner organizations from Montenegro, private sector organizations, NGOs and research institutions, as well as national and international consultancy services, which will all be included in order to provide specific expertise and knowledge.

Advisory Board will be composed of representatives of prominent academic and scientific institutions that will follow the project progress and offer expert advice as appropriate during the implementation of activities that require exceptional scientific insight.

The detailed project implementation arrangement scheme is given in Annex H.

A.10. Knowledge Management. Outline the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

The proposed project will build upon the results of completed and make synergies with previous UN Environment and DFS and on-going UN Environment projects and initiatives already mentioned under point A.6.

Additionally, the project entails capacity building exercises both for decision makers and PA management staff. Information on ecosystem assets gathered through Component 1 will be transferred to a higher scale providing for a comprehensive national-level information system (in GIS). All this information will be available at the Ministry of Sustainable Development and Tourism and ready for use by different users through open access, including Environmental Protection Agency, Institute for Marine Biology, etc.

Benefits to the PA system and conservation in the country are expected from supporting a "learning culture" within the agencies responsible for PA management so that lessons learned and knowledge generated through the project can be disseminated to a wider audience. Several project activities supported knowledge transfer, capacity building and outreach so that lessons learned and experiences gained from the project can be replicated in different regions of the country.

This project will coordinate the efforts on establishing coastal and marine component of Natura 2000 network, which is currently ongoing. The proposed UNEP/GEF project will also produce three management plans for selected C / MPAs to enable their management effectiveness. Further on, the project will deliver guidelines with lessons learned and recommendations on changes to national legislation to lead future efforts on expansion of PAs.

A.11. Consistency with National Priorities. Is the project consistent with the National strategies and plans or reports and assessements under relevant conventions? (yes ☒ /no☐). If yes, which ones and how: NAPAs, NAPs, NBSAPs, ASGM NAPs, MIAs, NCs, TNAs, NCSA, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

Existing national strategies and plans relevant for biodiversity conservation include:

- The National Strategy on Sustainable Development
- The Spatial Plan of Montenegro 2020, with Special Purpose Spatial Plan for the Public Maritime Domain adopted in 2007
- Special Purpose Spatial Plan for the Coastal Zone of Montenegro from 2015
- The National Biodiversity Strategy and Action Plan 2016-2020

The National Strategy on Sustainable Development (NSSD)

Currently valid NSSD was adopted in 2007, while the new NSSD is currently under development.

As for the NSSD from 2007, the basis of strategic planning of nature protection and biological diversity preservation has been laid down in this document. NSSD was the first national document to set specific objectives regarding proclamation of the coastal and marine PAs. Biodiversity related objectives of the NSSD are:

- Increase national nature PAs to 10% of the territory and protect at least 10% of the coastal area by 2009; use the classification of habitat types set by the Emerald and Natura 2000 networks in identifying PAs while taking into account their representativeness
- Establish an efficient system for managing nature PAs (harmonized with the IUCN management categories, ensuring stakeholders' participation).
- Improve the legal framework for the protection of biodiversity; strengthen human resources and develop an effective system for biodiversity monitoring.

Special Purpose Spatial Plan Public Maritime Domain (2007)

The Plan provides guidelines for development, use and protection of public maritime domain taking into account specificities and limitations of the area, general development guidelines for Montenegro and international standards for managing coastal areas.

Special Purpose Spatial Plan for the Coastal Zone of Montenegro (2015)

This Plan establishes measures for defining the tourist development zones within PAs. It is also defining the conditions for use of the coastal area of Montenegro and it elaborates the existing PA in light of borders and their set of values. The new PAs should be similarly included in the Plan.

National Biodiversity Strategy and Action Plan 2016-2020 (NBSAP, 2016)

One of the operational goals of the NBSAP states that it is necessary to establish an integrated and effective green network that includes new PAs, where there are three activities in Action Plan designated to this goal:

1. Increase the surface area of PAs to at least 17% of state territory
2. Establish coastal and marine PAs (accounting for at least 10% of the total PA surface)
3. Establish an ecological network in Montenegro, including responding ecological corridors

Besides addressing national priorities, NBSAP goals were developed in a way as to support implementation of the Convention (UNCBD) and Strategic Plan 2011-2020.

Montenegro has also ratified Barcelona Convention on the protection of Mediterranean Sea against pollution and Bern Convention on binding international legal instrument in the field of nature conservation.

United Nations Development Assistance Framework for Montenegro (UNDAF, 2017-2020)

The main areas of work include the following:

- Development of management plans for natural and cultural protected areas and sites that adequately address sustainable development issues,
- Sustainable spatial planning for efficient use of natural resources and decreased negative environmental impact.

A.12. M & E Plan. Describe the budgeted monitoring and evaluation plan.

Budgeted M&E plan is provided in the Annex G.

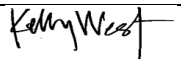
PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. Record of Endorsement[87] of GEF Operational Focal Point (S) on Behalf of the Government(S): (Please attach the *Operational Focal Point endorsement letter(s)* with this template. For SGP, use this SGP OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE *(MM/dd/yyyy)*
Marija Vukcevic	Director General GEF OFP	MINISTRY OF SUSTAINABLE DEVELOPMENT AND TOURISM	**01/16/2017**

B. GEF Agency(ies) Certification

This request has been prepared in accordance with GEF policies[88] and procedures and meets the GEF criteria for CEO endorsement under GEF-6.

Agency Coordinator, Agency Name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Kelly West, Senior Programme Manager & Global Environment Facility Coordinator Corporate Services Division UN Environment		August 14, 2017	Ersin Esen Task Manager	+41 22 917 8196	ersin.esen@unep.org

[87] For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.

[88] GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF

C. ADDITIONAL GEF PROJECT AGENCY CERTIFICATION *(Applicable only to newly accredited GEF Project Agencies)*

For newly accredited GEF Project Agencies, please download and fill up the required **GEF Project Agency Certification of Ceiling Information Template** to be attached as an annex to this project template.

ANNEXES

Annex A Project Results Framework
Annex B Calendar of Expected Reflows (N/A)
Annex C Detailed Project Workplan.xlsx
Annex D Summary of reporting requirements and responsibilities
Annex E Consultants to be hired & Terms of Reference
Annex F Detailed GEF and co-finance budget MNE
Annex G Costed M&E Plan
Annex H Project Implementation Arrangements
Annex I Deliverables and benchmarks
Annex J OFP Endorsement letter
Annex K Co-finance letters
Annex L ESERN Montenegro CMPA
Annex M Procurement Plan
Annex N Acronyms & Abbreviations
Annex Q Capacity Development Scorecard

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Project Outcomes	Outcome Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification
Project Objective: To improve the conservation and sustainable use of coastal and marine biodiversity through effective management of the coastal and marine protected areas (C/MPAs) subsystem by addressing institutional and financial sustainability.				
Component 1: Protection of valuable coastal and marine biodiversity assets and establishment of the integrated subsystem of C / MPAs				
Outcome 1.1. Representative C / MPAs identified to protect key coastal and marine ecosystems and biodiversity of global importance	At least **one data set** on biodiversity assets for the all coastal and marine ecosystems covering 93,243.48 hectares of coastal area of Montenegro	**No data set** on biodiversity in the country and particularly in the Coastal (terrestrial and marine) area (no comprehensive data sets) Scientific research are rarely implemented, and generally on a limited scale and as part of individual projects supported with funds from international sources	**Mid-Point Target (MT):** **1 Data Set** for the all coastal and marine ecosystems covering 93,243.48 hectares of coastal area of Montenegro **End of project Targets (ET)**: **1 Data Set** for the all coastal and marine ecosystems covering 93,243.48 hectares of coastal area of Montenegro, which enables developing criteria for prospective C / MPAs prioritization developed and agreed upon with decision makers, and aligned to create an updated sub-regional data base on important marine areas	Data sets and mapping in GIS database C / MPA prioritization list developed
Outcome 1.2. Management framework in place involving all relevant stakeholders for (i) network of C / MPAs in Montenegro; (ii) expansion of C / MPAs; (iii) compatibility of land/sea/natural resources usage with overall biodiversity management goal	**7 points increase** in the Capacity Development Scorecard for the Ministry of Sustainable Development and Tourism	Capacity Development Scorecard: **16** The existing management framework for the subsystem of C / MPAs is not operational Lack of capacities for effective management of the C / MPA subsystem No effective monitoring system for the C / MPAs subsystem in place	**MT**: Capacity Development Scorecard: **20** Capacity and governance needs including technical needs, human resources and legislation needs for successful management of C / MPAs identified and their roles clarified Awareness of decision-makers on the economic benefits of a well-managed network of coastal and marine PA system raised and increased, including sustainable use of coastal and marine habitats Potential socio-economic impacts of the project on local population identified	List of identified needs and roles Minutes from the first joint multi-stakeholder working group meeting Number of communication materials Training reports from modules for relevant authorities 10-Year Business Plan for effective management of C

Project Outcomes	Outcome Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification
		Lack of awareness on the benefits of well-managed network of C / MPAs	**ET:** Capacity Development Scorecard: **23** National planning framework for the network of C / MPAs is prepared and submitted for consultation with government List of actions to mitigate negative effects of the project on local population submitted for consultation with government	/ MPAs subsystem developed Prepared documents for designing national planning framework submitted to government Prepared assessment of socio-economic impacts on local population submitted to the government
Outcome 1.3. Status of protection for existing coastal PAs covering 13,012.19 hectares revised and plans for expansion of the PA network covering 2,301.2 ha in the coastal area of Montenegro defined	**Ha of areas proposed for revision of protection status** (Protection status of up to 13,012.19 hectares of existing coastal PAs revised) **Ha of new areas identified and planned for protection** (2,301.2 ha planned for protection in the coastal area of Montenegro)	0 Insufficient network of national PAs (12,75% of the country is protected or 176,117 ha), no MPA, i.e. C / MPAs 0	**MT:** Request for revision of the status of 13,012.19 ha existing coastal PAs prepared **ET: Request for revision 13,012.19 hectares** submitted to the government **ET**: **2,301.2 ha** planned for expansion of the C / MPA network	Documents prepared for revision of existing coastal PAs Plan for expansion of the C / MPA network in the coastal area of Montenegro
Outcome 1.4. Priority integrated C / MPAs established, namely Platamuni, Katici and Stari Ulcinj covering at least 2,301.2 hectares	Number and ha of new integrated C / MPAs proposed for protection of representative coastal and marine ecosystems (covering up to 2,301.2 ha)	No MPA, 1 CPA (Tivat Salina)	**MT:** Study on nature protection and other required documentation for establishing 3 new C / MPAs prepared, including zoning applicable for spatial planning documentation. **ET:** Increased number of national coastal PAs to 4 by **3 new C / MPAs covering 2,301.2 hectares**	Valorisation studies Reports from the consultation processes Three draft C / MPA establishment acts

Project Outcomes	Outcome Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification
	% increase per annum in habitat distributional range of *Posidonia oceanica* as an endangered species and important habitat endemic to the Mediterranean Sea (1.5% increase)	0	**1.5 % increase per annum** in habitat distributional range of *Posidonia oceanica* as an endangered species and important habitat endemic to the Mediterranean Sea	
Output 1.1.1 The biodiversity and ecosystem services of coastal and marine ecosystems are assessed and nationally and globally significant sites for biodiversity conservation are identified as per national and international standards and requirements Output 1.1.2 Comprehensive database on the status of coastal and marine ecosystems is established as to support science policy interface for protection of biodiversity assets and harmonization of development plans with the value of biodiversity assets and aligned with work towards creating an updated sub-regional data base on important marine areas Output 1.2.1. Capacity and governance needs, including technical needs, human resources (including gender consideration) and legislation needs for successful management of C / MPAs identified Output 1.2.2. Joint multi-stakeholder C / MPAs working group established to form a coordination mechanism for project implementation Output 1.2.3. National planning framework for the network of C / MPAs is prepared, including the roles and responsibilities of State, private sector, and communities (diversified by gender) for C / MPAs management clarified Output 1.2.4. 10-Year Business Plan developed and implemented for the expansion and effective management of the network of C / MPAs, including activities on promotion of C/M PAs in the context of sustainable tourism development Output 1.2.5. Awareness of decision-makers on the economic benefits of a well-managed network of C / MPAs, including sustainable use of coastal and marine habitats raised and increased Output 1.2.6. Development of the communication strategy to ensure outreach on the activities and benefits of the project for the local, national and international community Output 1.2.7. Development of an assessment of socio-economic impacts on local population by establishing new C / MPAs Output 1.3.1 Necessary documents for revision of existing coastal PAs covering 13,012.19 hectares prepared and submitted for adoption Output 1.3.2 Plans for expansion of the PA network in the coastal area of Montenegro prepared and submitted for adoption Output 1.4.1 Study on nature protection and other required documentation for establishing three priority C / MPAs prepared, including zoning applicable for spatial planning documentation. Output 1.4.2 Consultation process ensuring gender balance provided prior to adoption acts on establishing three new integrated C / M PAs Output 1.4.3 Legal instruments for establishing the new PAs are prepared and the adoption requests for the three new C / MPAs are submitted				
Component 2: Management effectiveness is ensured in the C / MPAs in Platamuni, Katici and Stari Ulcinj critical land/seascapes				
Outcome 2.1. Improved C / MPA management effectiveness in three newly established C / MPAs	**27 points increase** in PA Management Effectiveness Tracking Tool (METT) scores[89]	METT Baseline: 23; Financial Sustainability Scorecard: 43	**MT:** **METT: 30** **Financial Sustainability Scorecard: 75**	Management plans for three new C / MPAs Study on economic benefits taking into consideration

[89] Baseline (23) and target scores (MT:30, ET: 50) are valid for all three PAs

Project Outcomes	Outcome Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification
Platamuni, Katici and Stari Ulcinj	**72 points increase** in Financial Sustainability Scorecard		Management plans for three new C / MPAs drafted and submitted to government for consultations Financial strategies developed for the three new C / MPAs Tourism development area plans defined for three new C / MPAs and submitted for adoption Management and staff for the three new C / MPAs identified[90] and trained Monitoring and enforcement system developed **ET:** **METT: 50** **Financial Sustainability Scorecard: 115** Effective and sustainable management plans in place for the three new C / MPAs	gender and women's empowerment issues Financial strategy Staff records Training reports Tourism development areas identified and zoned Monitoring system
Outcome 2.2. Lessons learned platform for establishment and effective management of C / MPAs guiding future efforts on expansion of PAs	**At least 2** guidelines containing lessons learned published	0 C / MPAs have no adequate management option for possible rights-based and co-management agreements for long term financial sustainability of C / MPAs	**MT: 0** Recommendations for necessary amendments in the national legislation collected **ET: At least 2 publications on lessons learned published** Guidelines containing recommendations drafted in consultation with relevant stakeholders and published	Published guidelines
Output 2.1.1. Assessments for setting up management of integrated C/MPAs, including rights-based and co-management agreements for long term financial sustainability in line with the national framework developed Output 2.1.2. Management Plans for three new C/MPAs developed with integrated Financial strategy to reduce financing gaps Output 2.1.3. Tourism development area plans developed for three new C/MPAs to be integrated in the spatial planning Output 2.1.4. Employment of management and staff for the three new C/MPAs facilitated and their capacities raised for effective PA management[91] Output 2.1.5. A monitoring and enforcement system developed and implemented to reduce threats to biodiversity in C/MPAs and their buffer areas and ensure effective PA management Output 2.2.1 Guidelines with lessons learned developed and endorsed by the relevant institutions, including recommendations on changes to national legislation.				

[90] GEF funds will not be used for staff salaries
[91] GEF funds will not be used for staff salaries

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used**)**

Provide a calendar of expected reflows to the GEF/LDCF/SCCF Trust Funds or to your Agency (and/or revolving fund that will be set up)

N/a